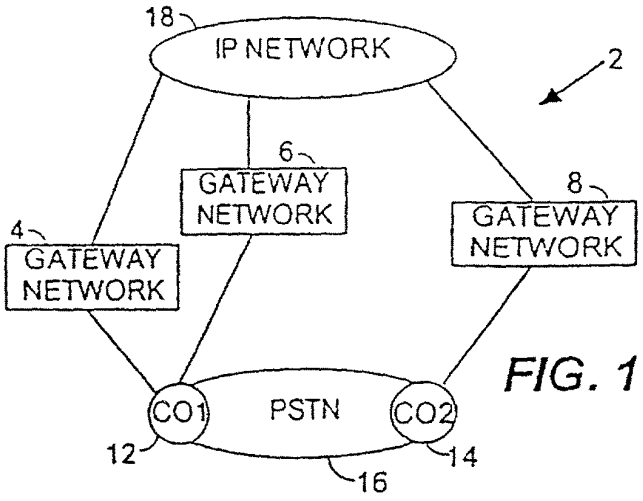
18
IP NETWORK
2
6
GATEWAY NETWORK
8
GATEWAY NETWORK
4
GATEWAY NETWORK
CO1
PSTN
CO2
12
14
16

FIG. 1

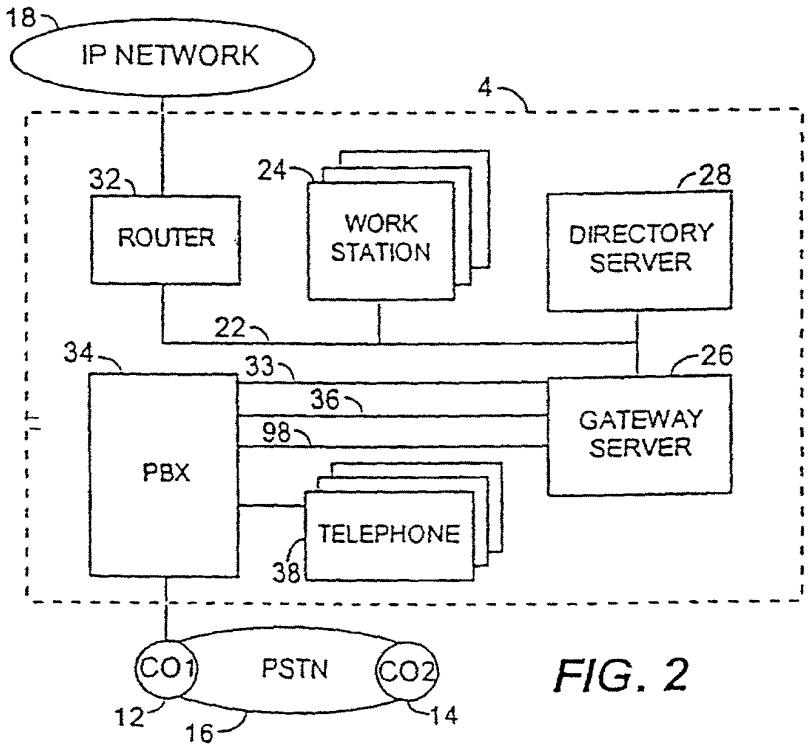
18
IP NETWORK
4
32
ROUTER
24
WORK STATION
28
DIRECTORY SERVER
22
34
33
26
36
98
PBX
GATEWAY SERVER
TELEPHONE
38
CO1
PSTN
CO2
12
16
14

FIG. 2

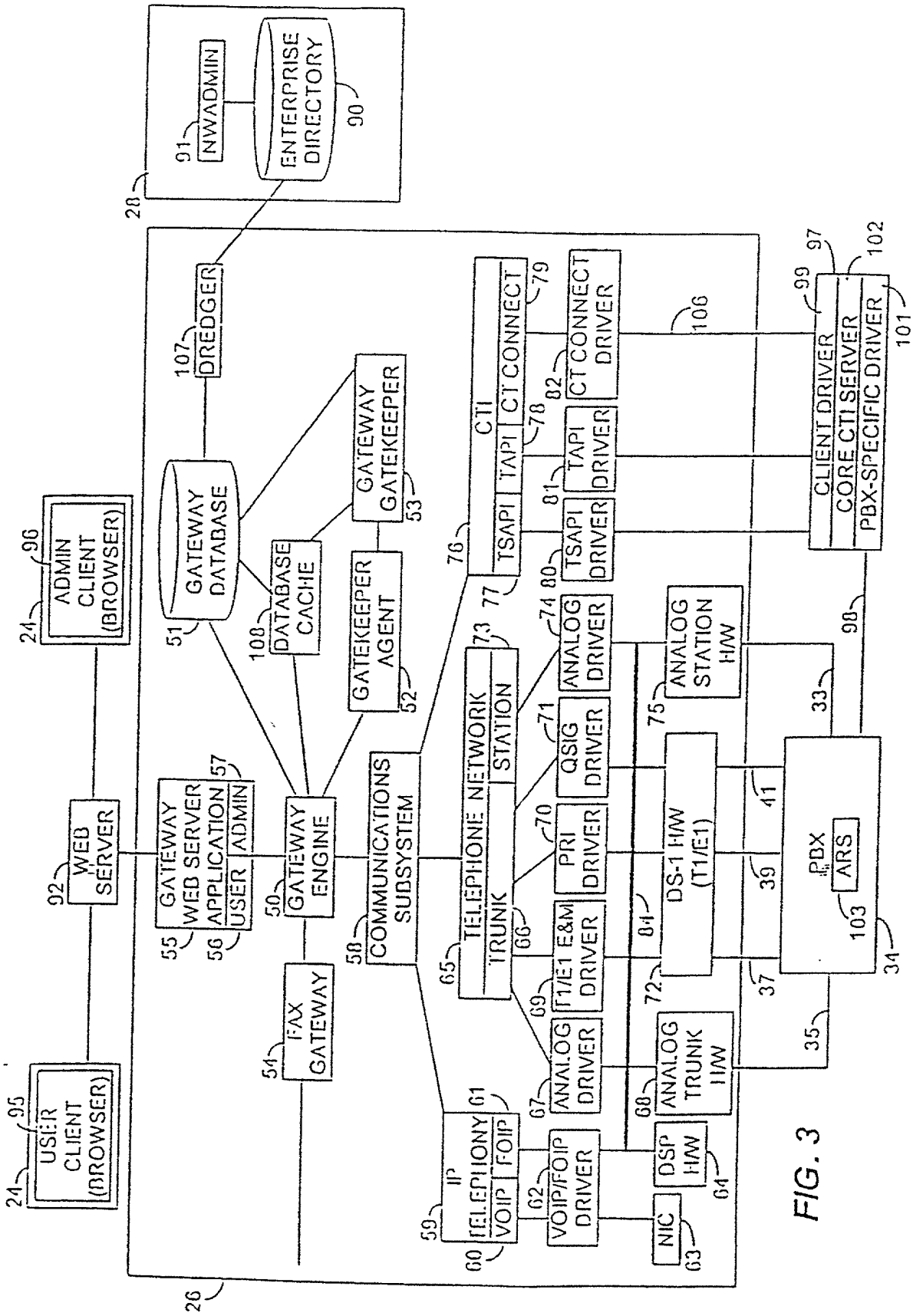
USER CLIENT (BROWSER)
ADMIN CLIENT (BROWSER)
WEB SERVER
GATEWAY WEB SERVER APPLICATION USER ADMIN
GATEWAY ENGINE
FAX GATEWAY
COMMUNICATIONS SUBSYSTEM
IP TELEPHONY VOIP FOIP
VOIP/FOIP DRIVER
NIC
DSP HW
GATEWAY DATABASE
DREDGER
DATABASE CACHE
GATEKEEPER AGENT
GATEWAY GATEKEEPER
NWADMIN
ENTERPRISE DIRECTORY
TELEPHONE NETWORK TRUNK STATION
ANALOG DRIVER
T1/E1 E&M DRIVER
PRI DRIVER
QSIG DRIVER
ANALOG TRUNK HW
DS-1 HW (T1/E1)
CTI TSAPI TAPI CT CONNECT
TSAPI DRIVER
TAPI DRIVER
CT CONNECT DRIVER
ANALOG STATION HW
CLIENT DRIVER
CORE CTI SERVER
PBX-SPECIFIC DRIVER
PBX ARS

FIG. 3

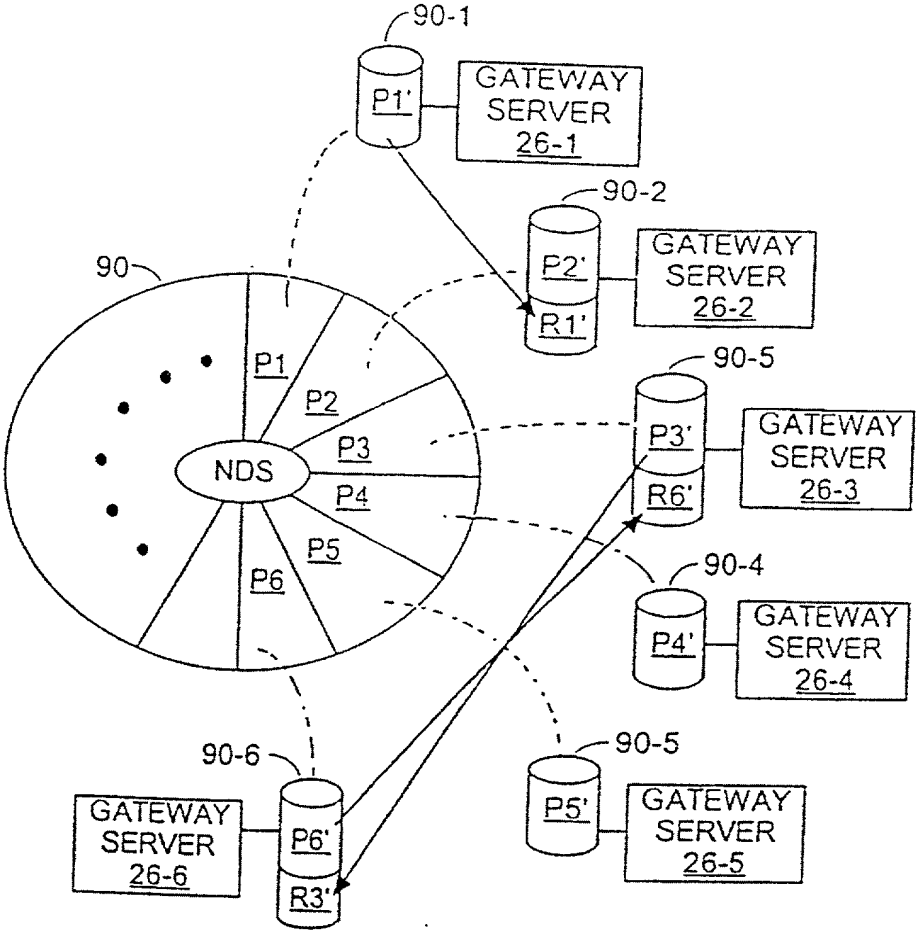
90-1
P1'
GATEWAY SERVER 26-1
90-2
P2'
R1'
GATEWAY SERVER 26-2
90
P1
P2
P3
NDS
P4
P5
P6
90-5
P3'
R6'
GATEWAY SERVER 26-3
90-4
P4'
GATEWAY SERVER 26-4
90-6
GATEWAY SERVER 26-6
P6'
R3'
90-5
P5'
GATEWAY SERVER 26-5

FIG. 3A

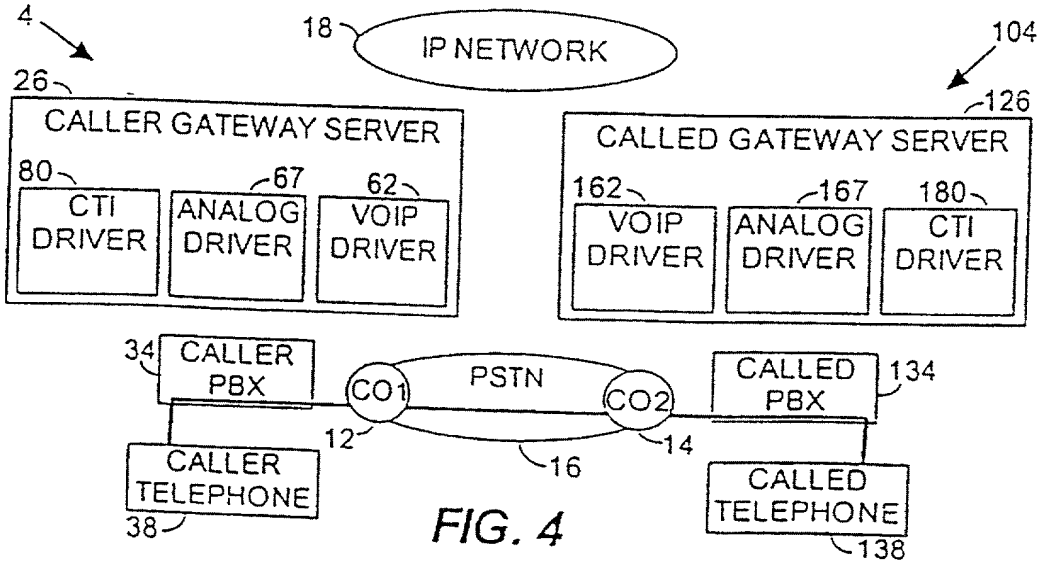
4
18
IP NETWORK
104
26
126
CALLER GATEWAY SERVER
CALLED GATEWAY SERVER
80
67
62
CTI DRIVER
ANALOG DRIVER
VOIP DRIVER
162
167
180
VOIP DRIVER
ANALOG DRIVER
CTI DRIVER
34
CALLER PBX
CO1
PSTN
CO2
CALLED PBX
134
12
14
16
CALLER TELEPHONE
38
CALLED TELEPHONE
138

FIG. 4

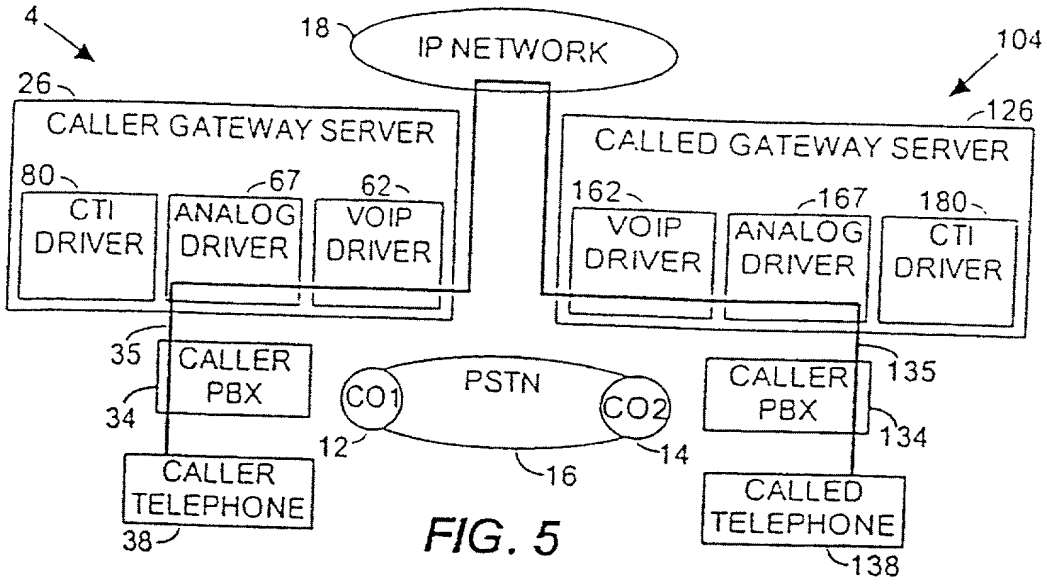

FIG. 5

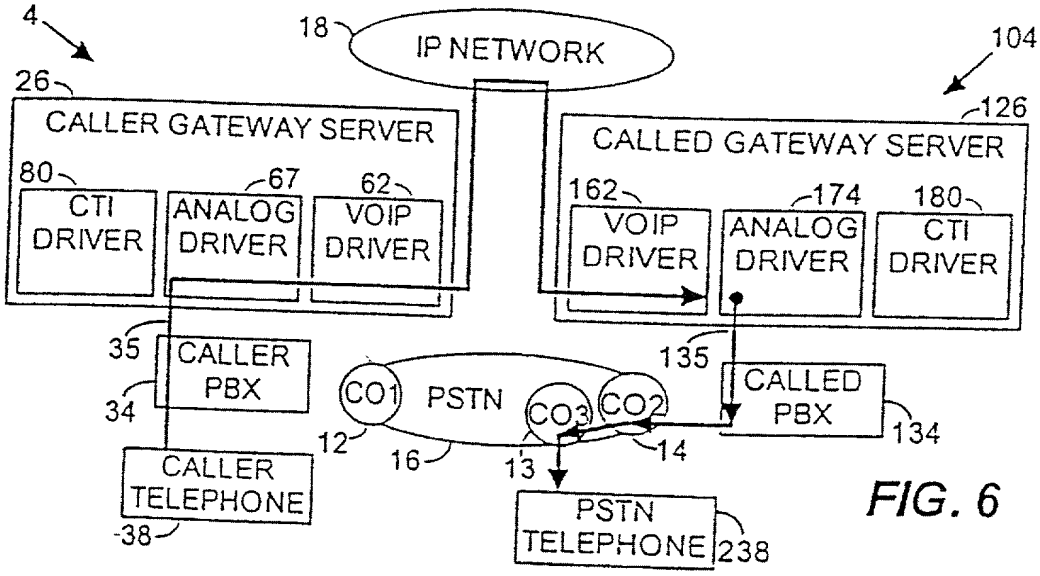

FIG. 6

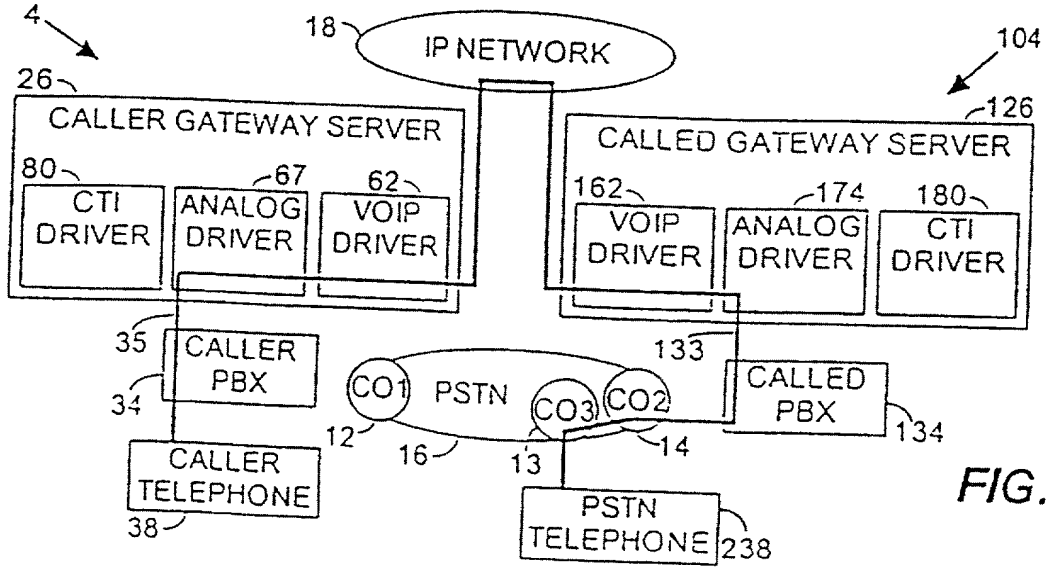

FIG. 7

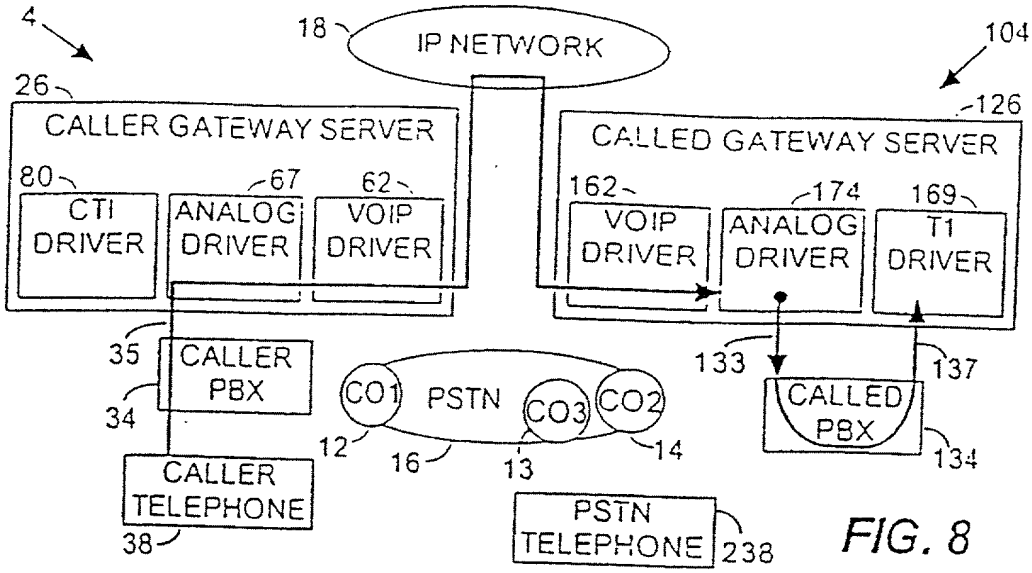

FIG. 8

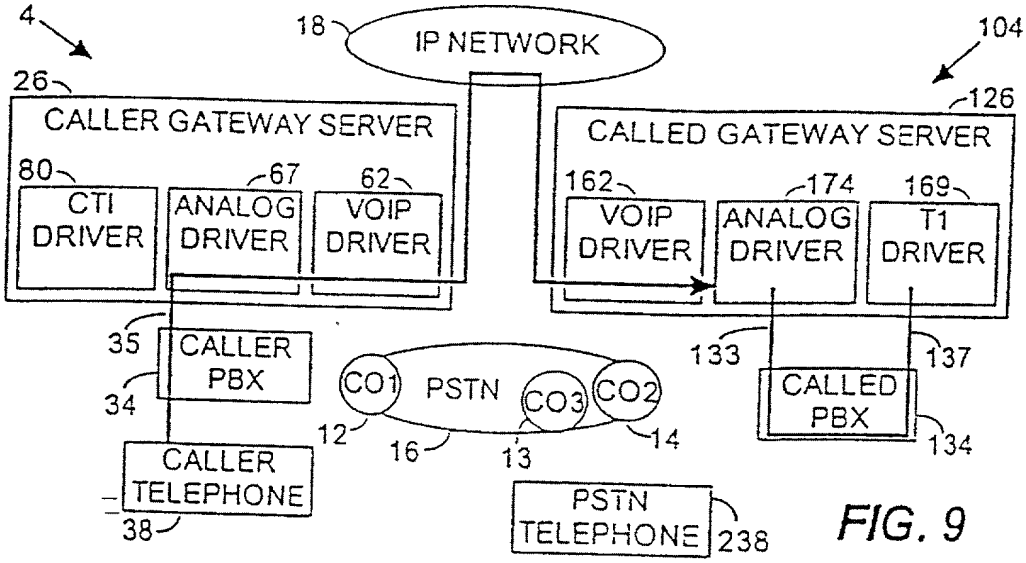

FIG. 9

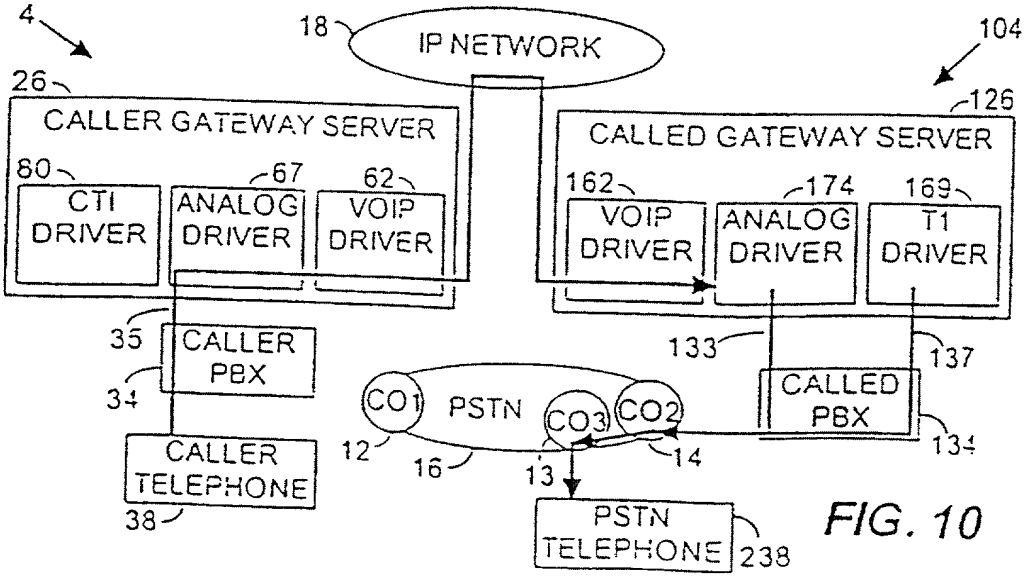

FIG. 10

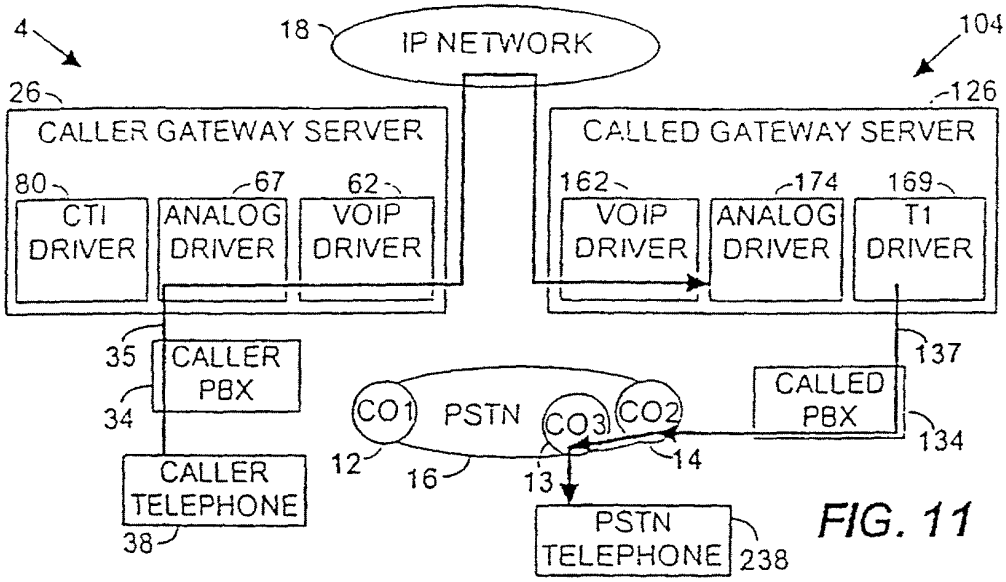

FIG. 11

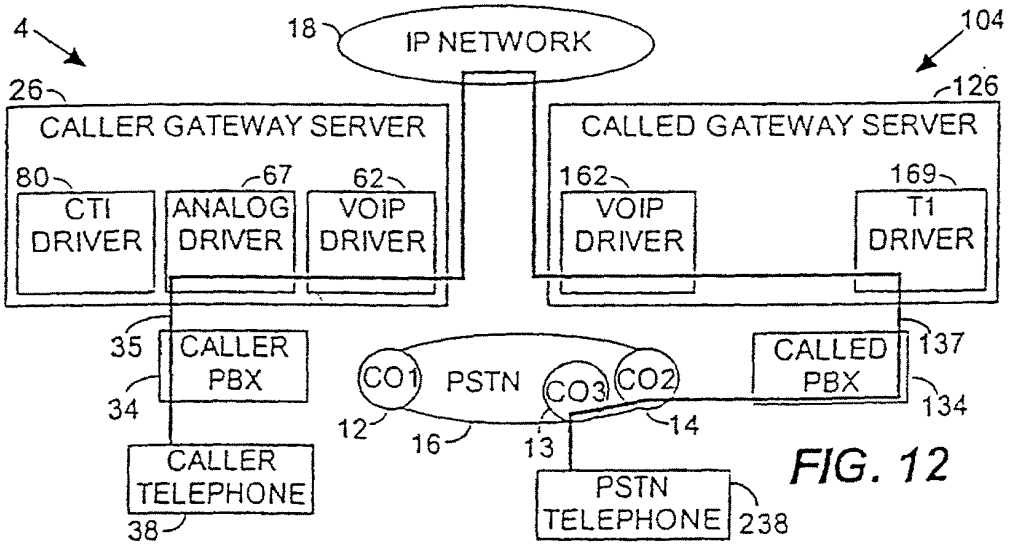

FIG. 12

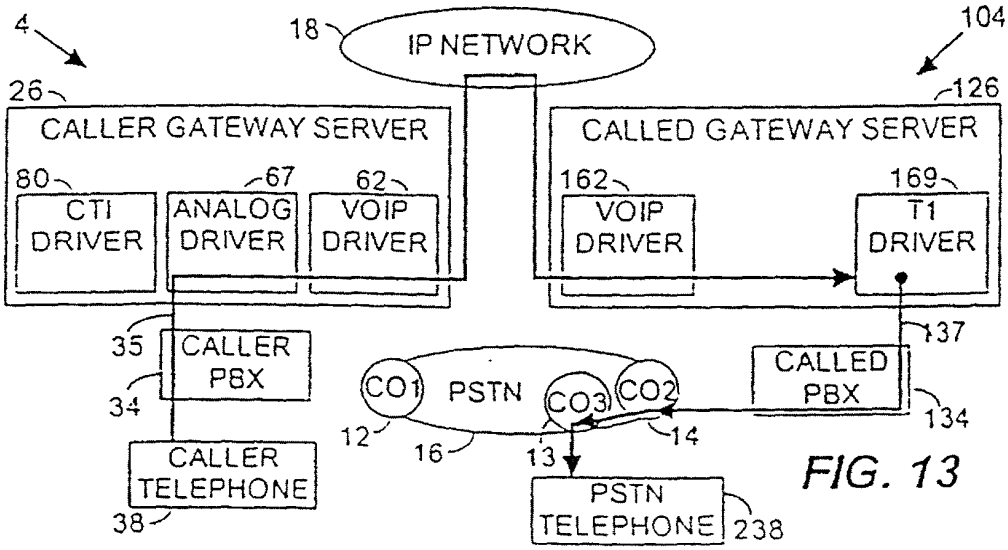

FIG. 13

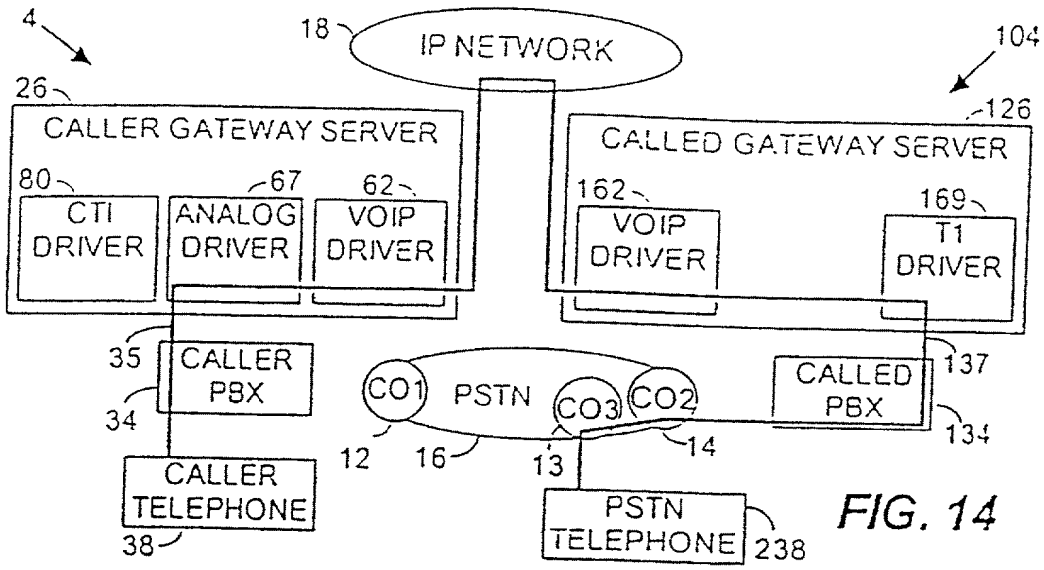

FIG. 14

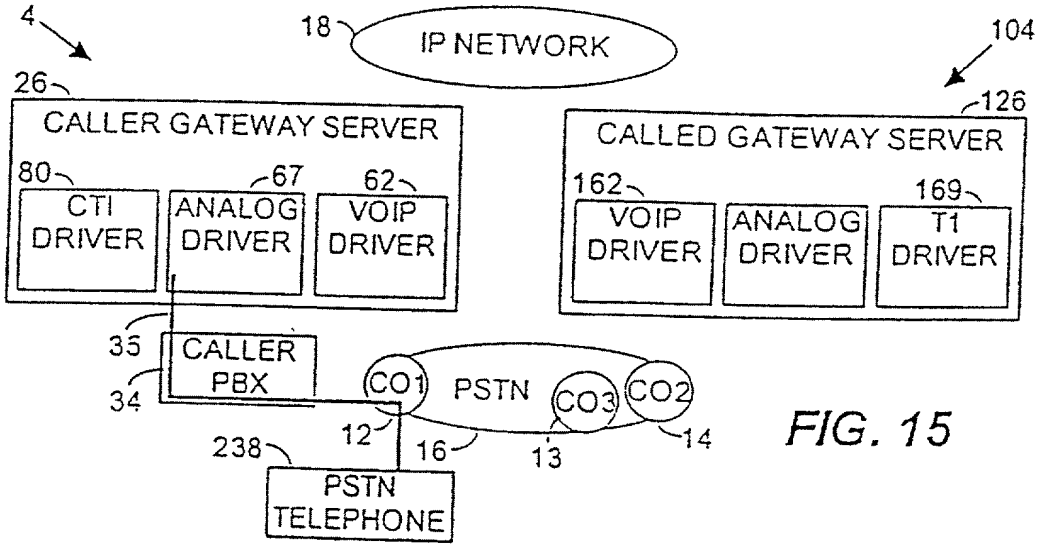

FIG. 15

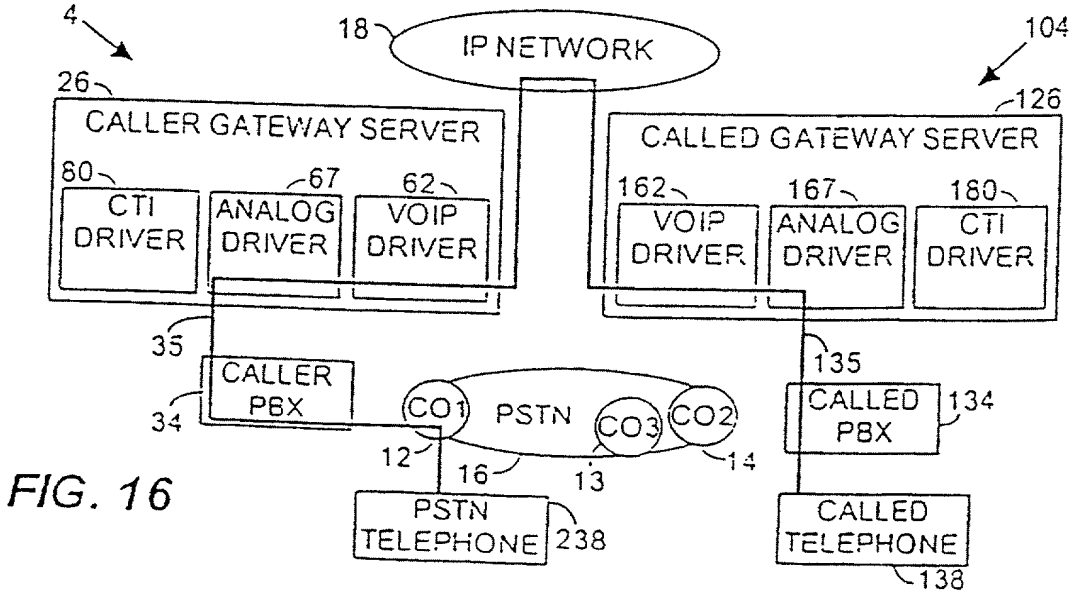

FIG. 16

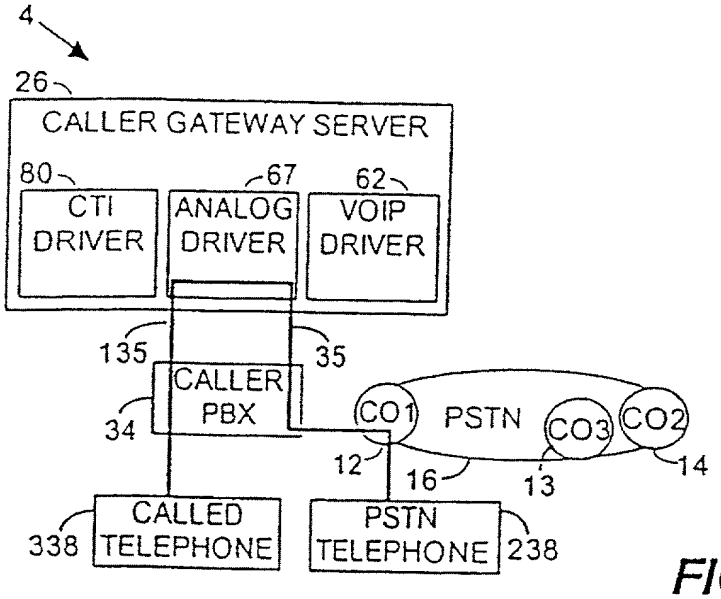

FIG. 17

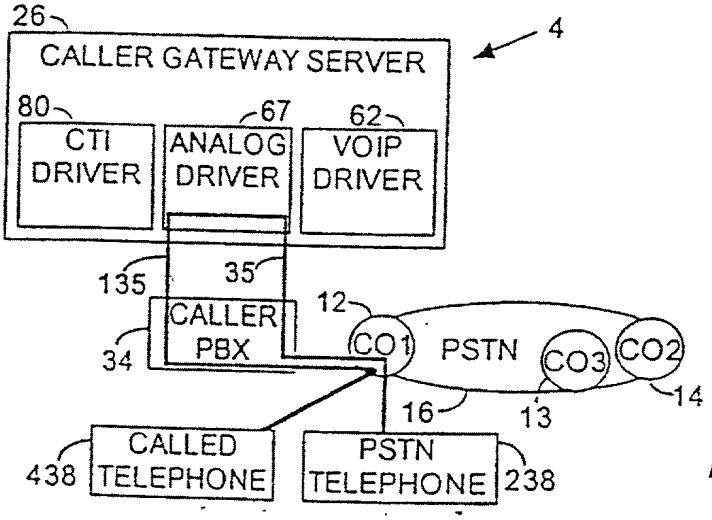

FIG. 18

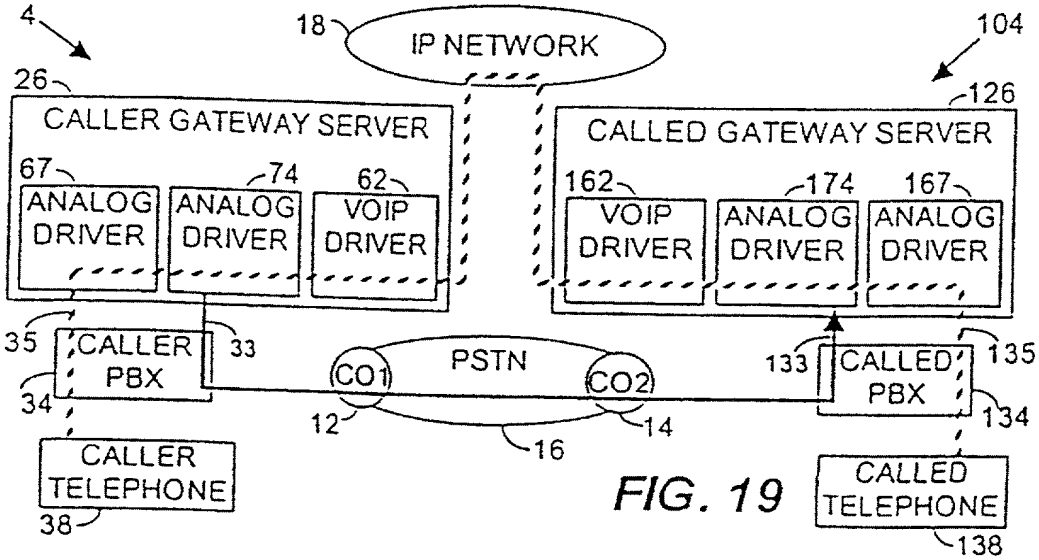

FIG. 19

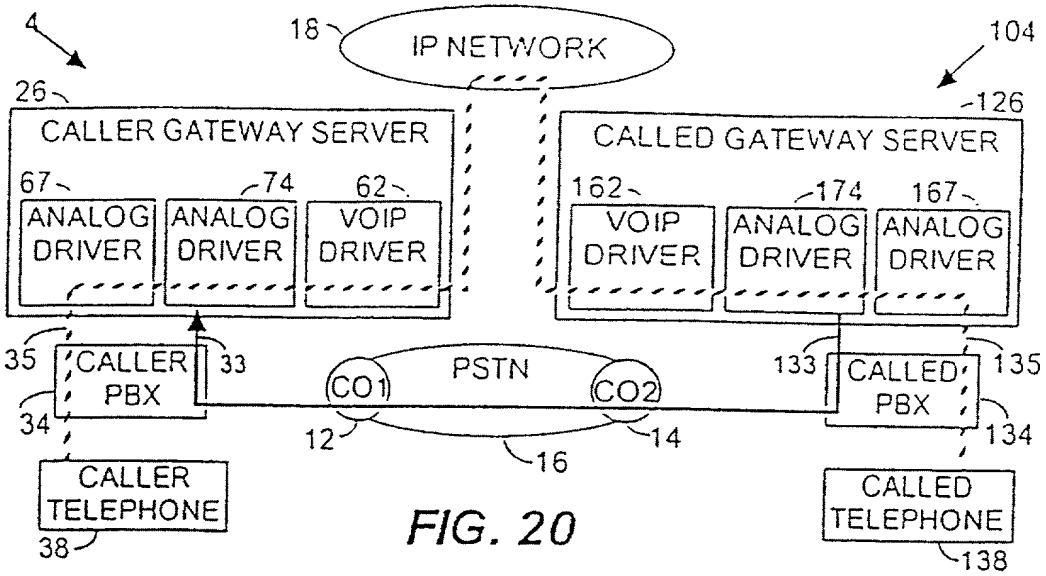

FIG. 20

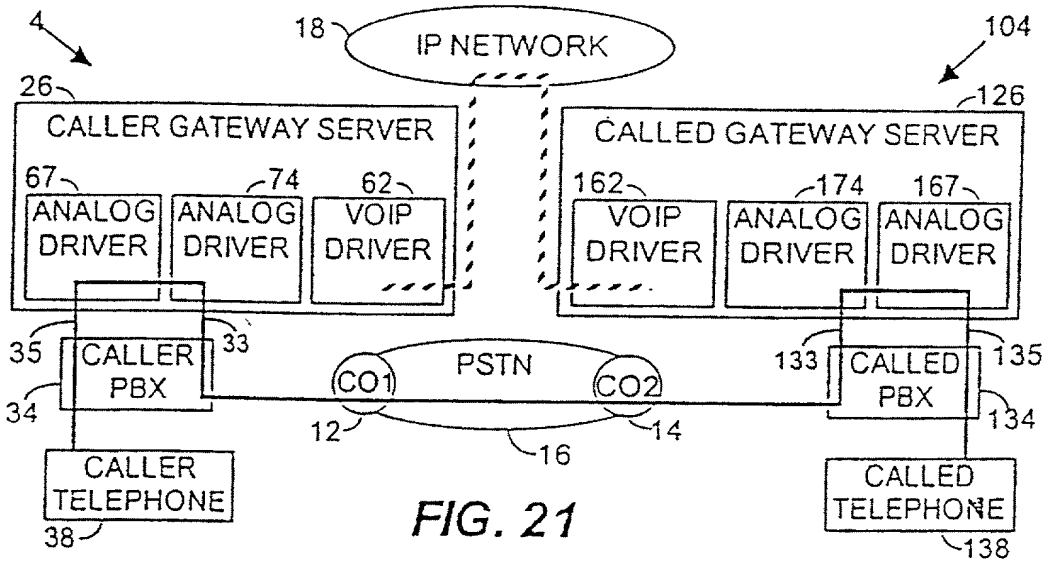

FIG. 21

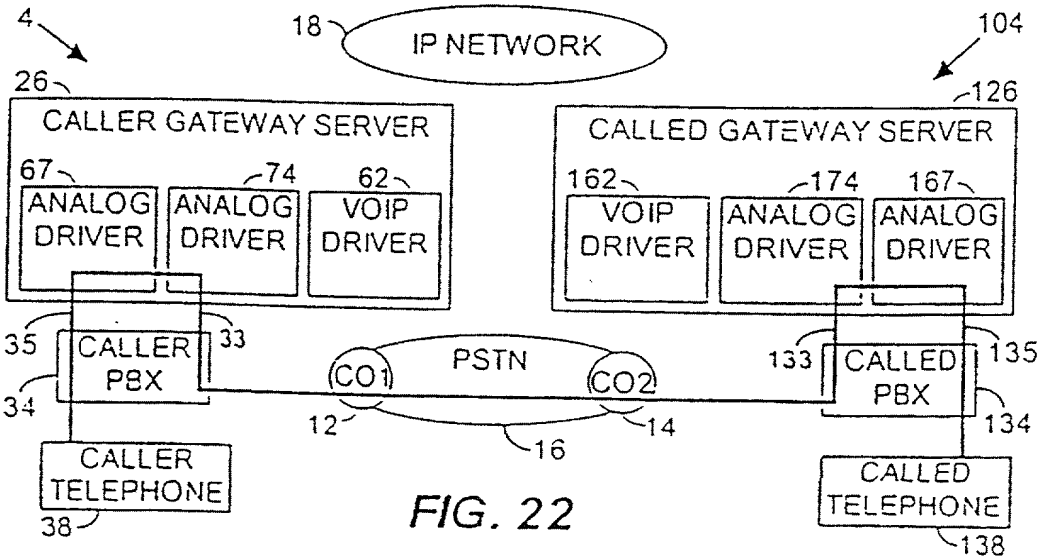

FIG. 22

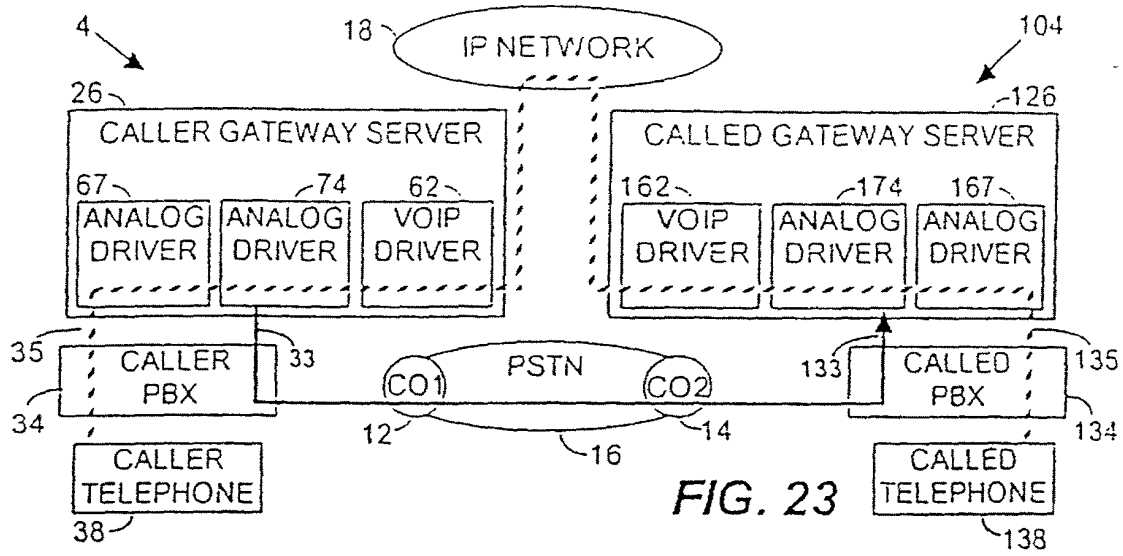

FIG. 23

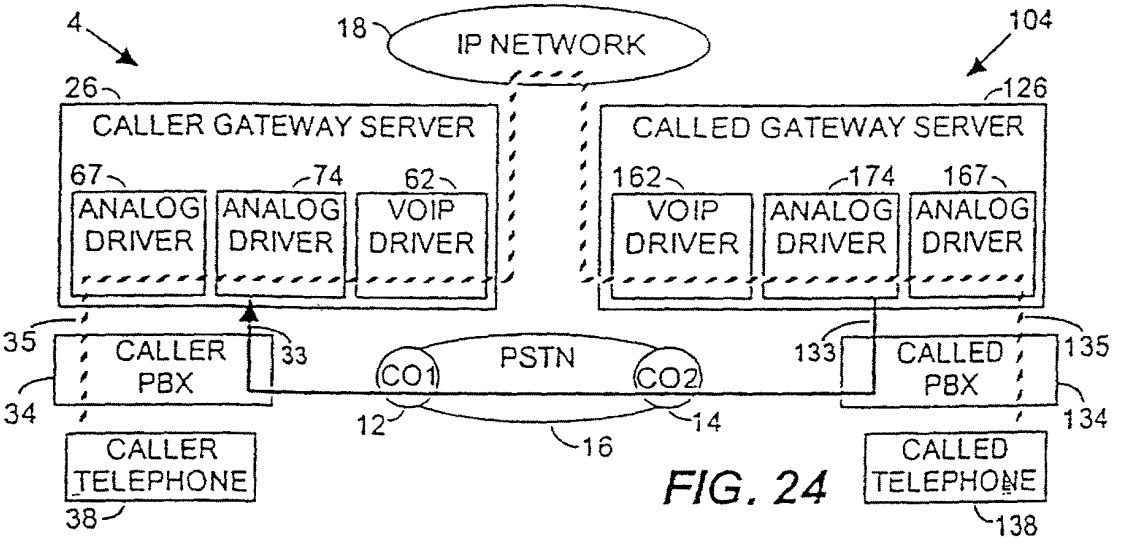

FIG. 24

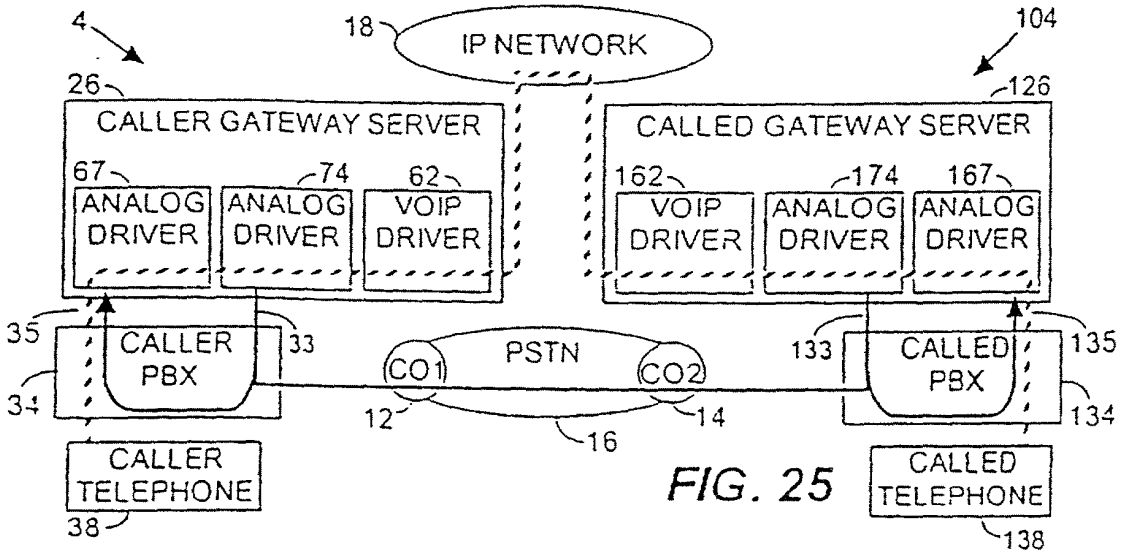

FIG. 25

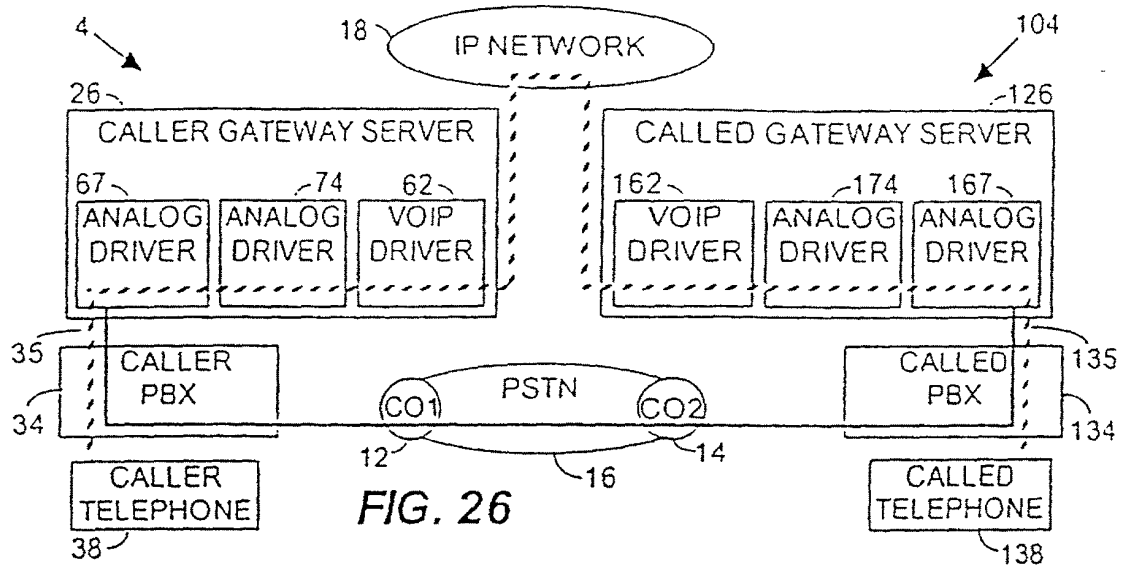

FIG. 26

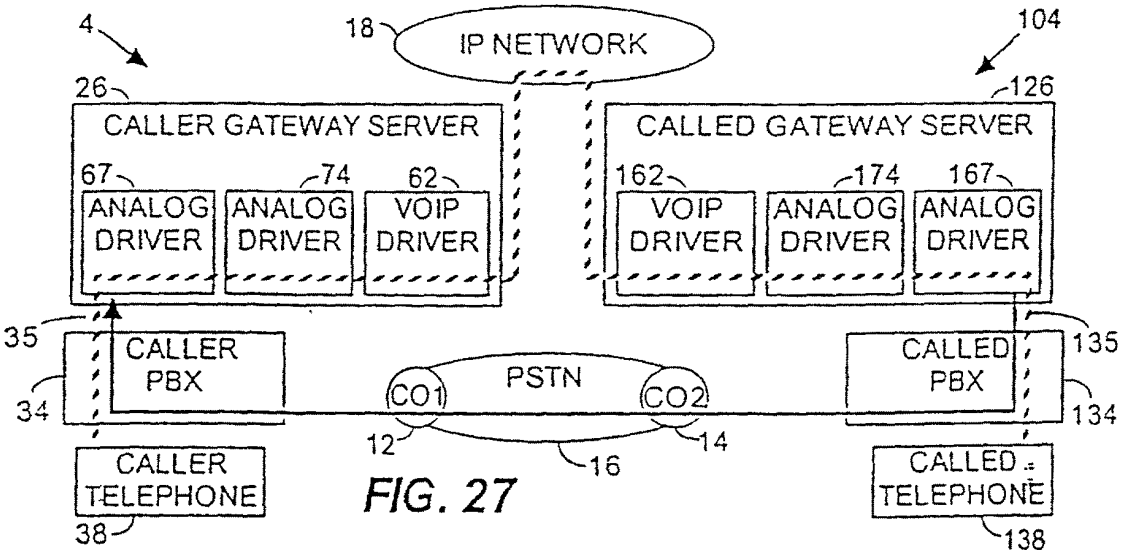

FIG. 27

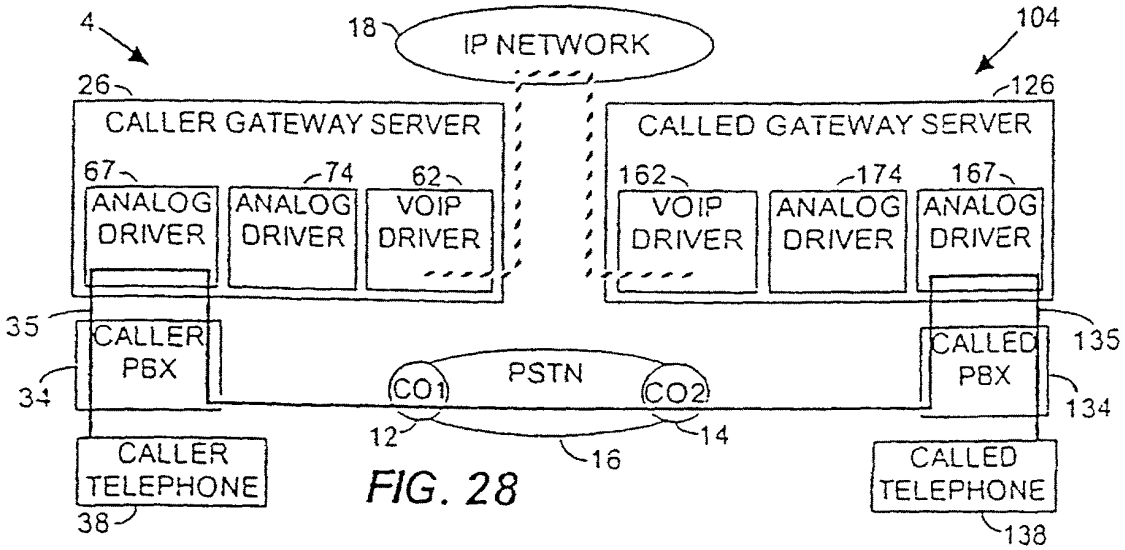

FIG. 28

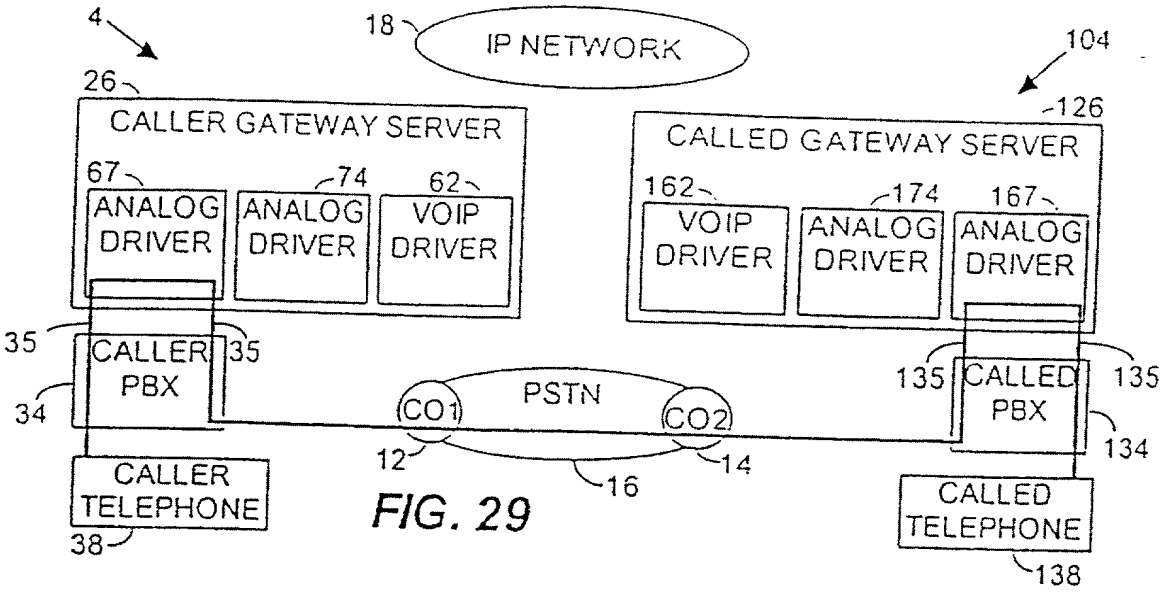

FIG. 29

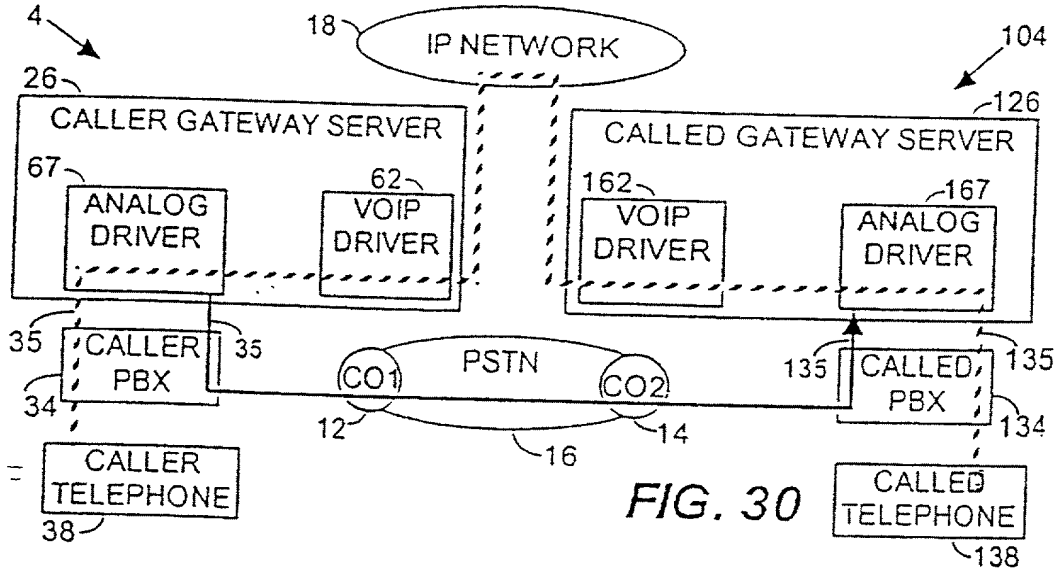

FIG. 30

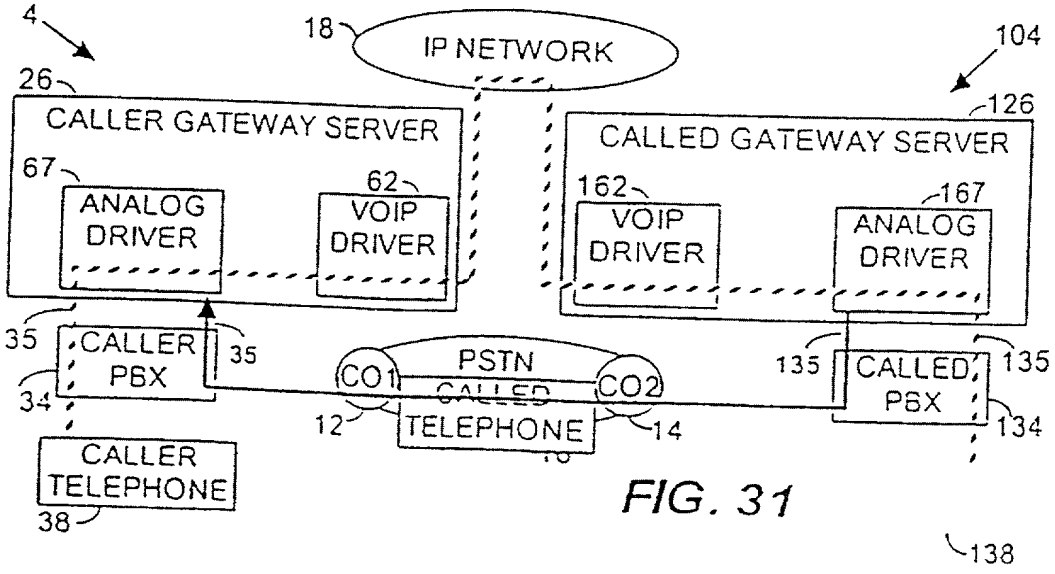

FIG. 31

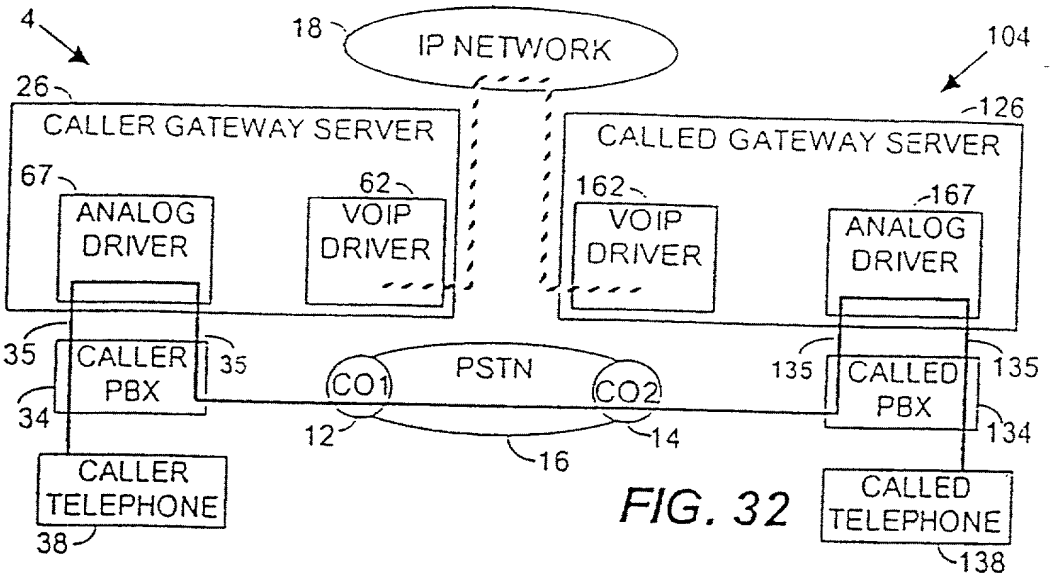

FIG. 32

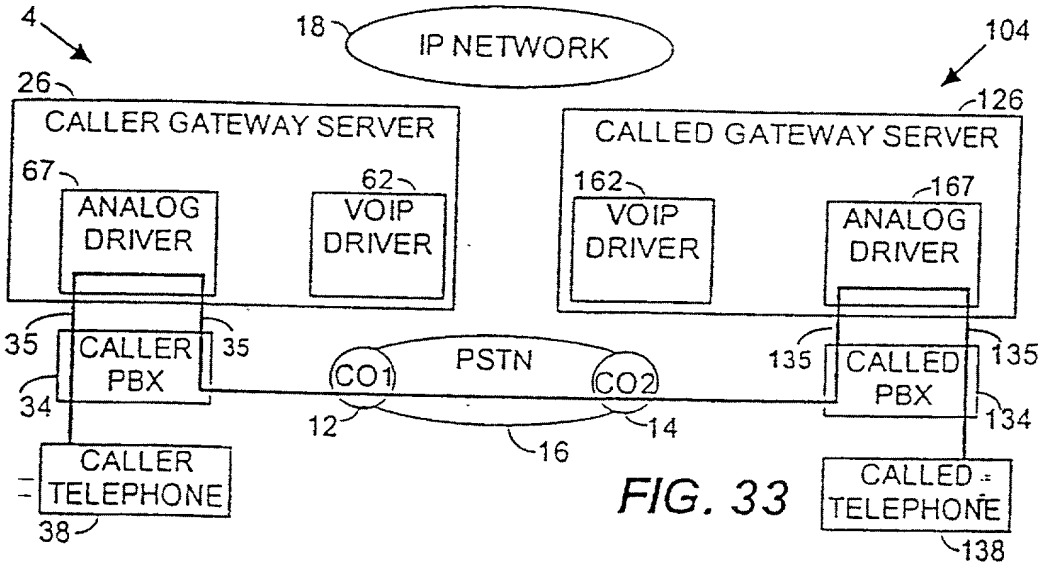

FIG. 33

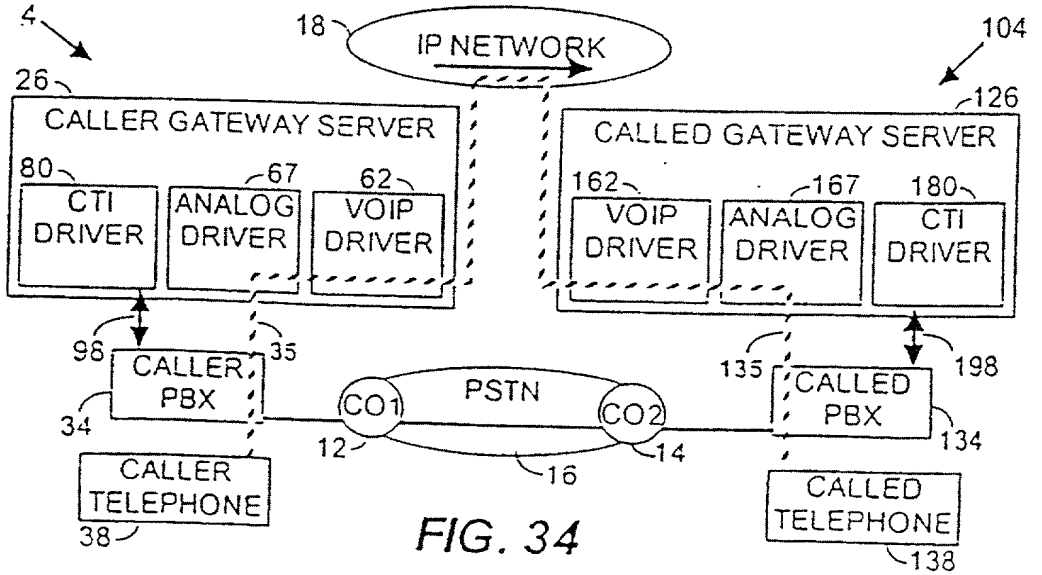

FIG. 34

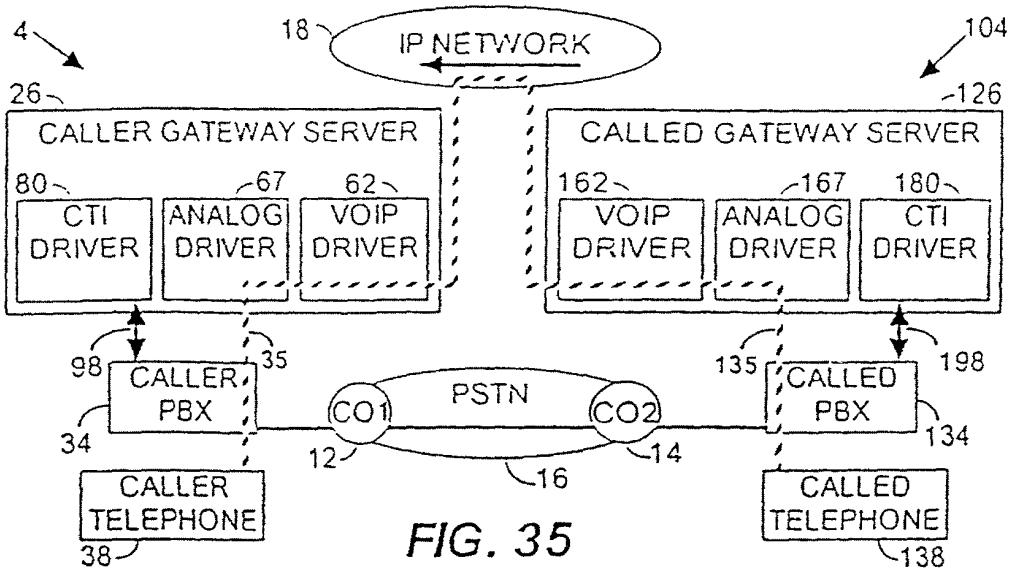

FIG. 35

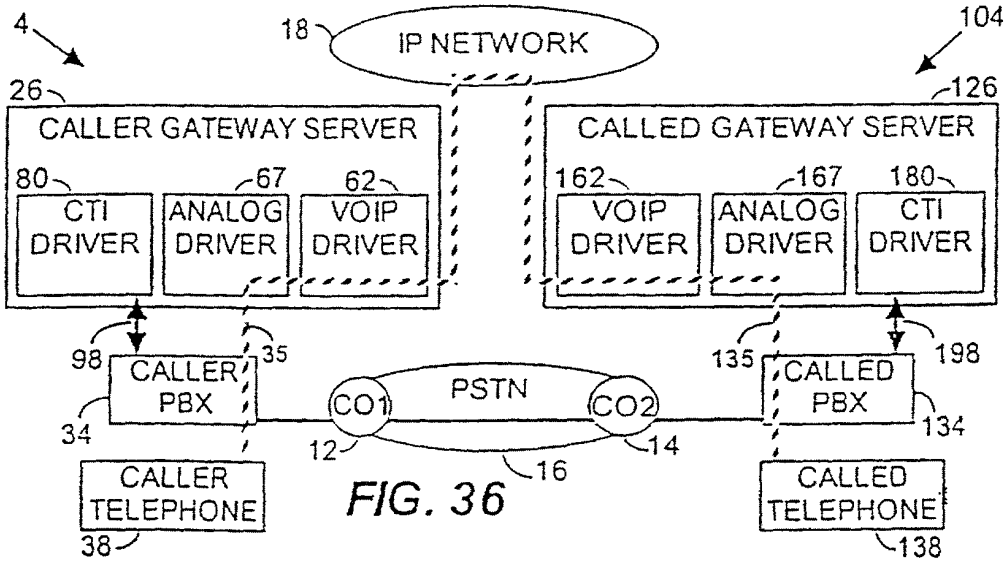

FIG. 36

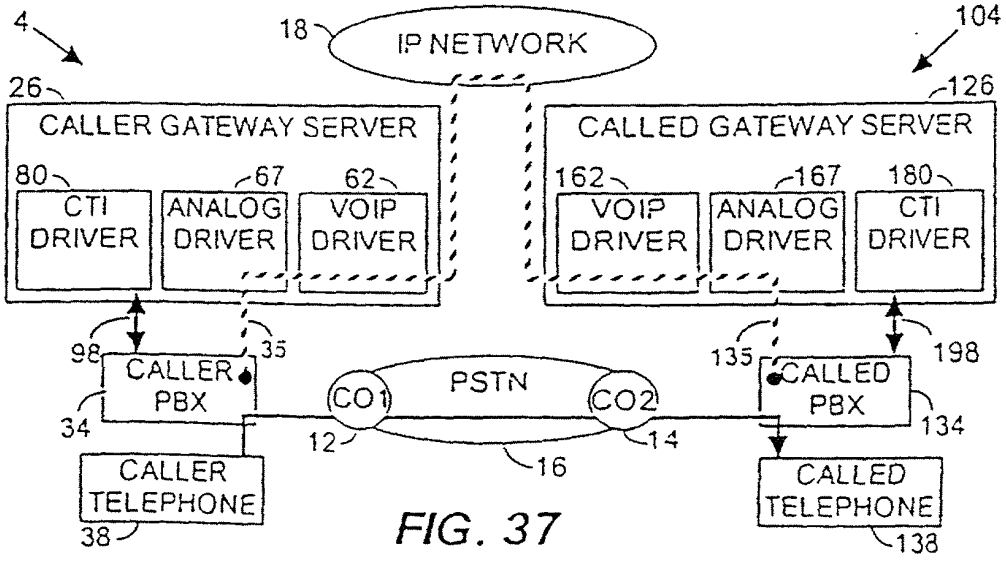

FIG. 37

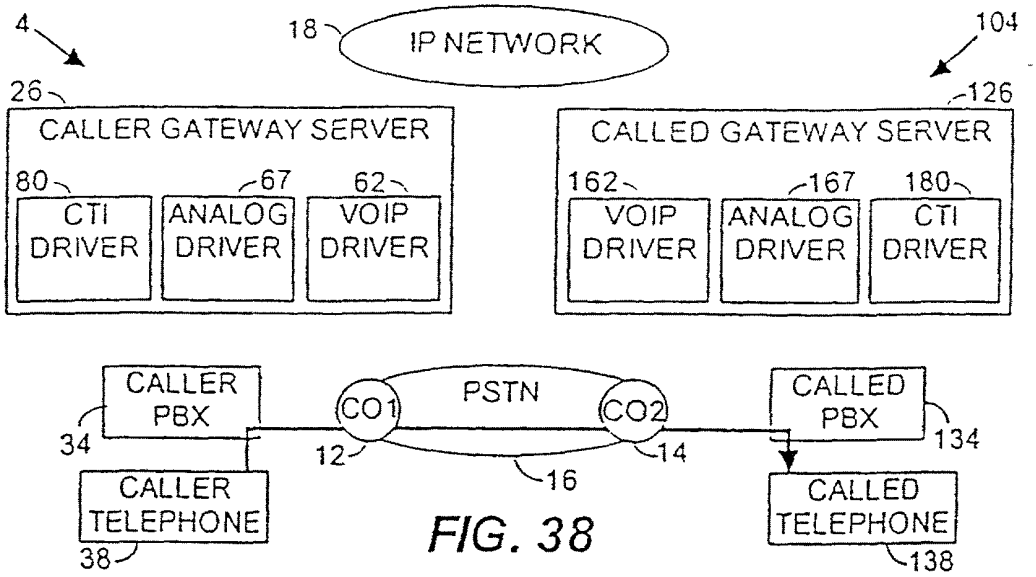

FIG. 38

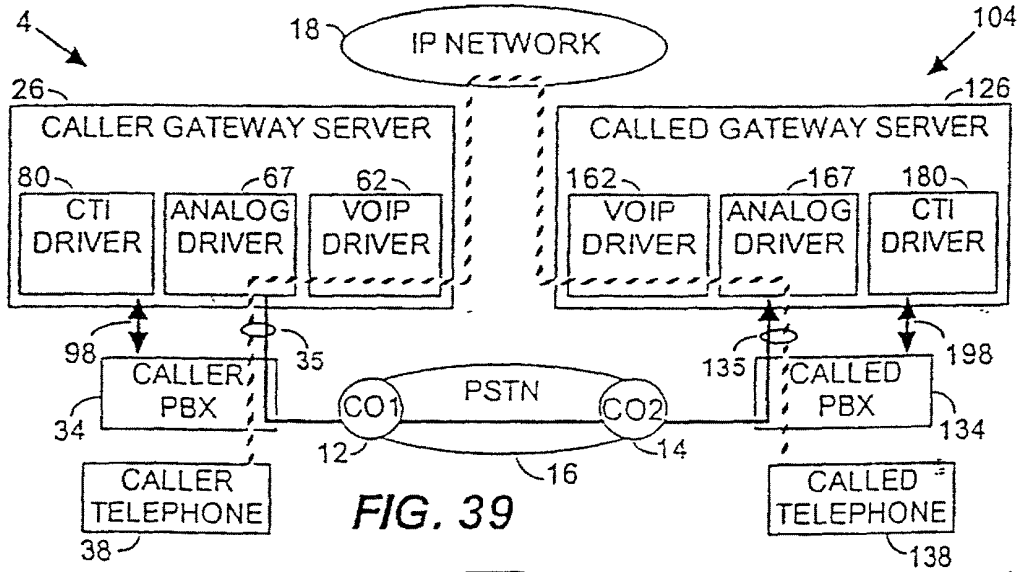

FIG. 39

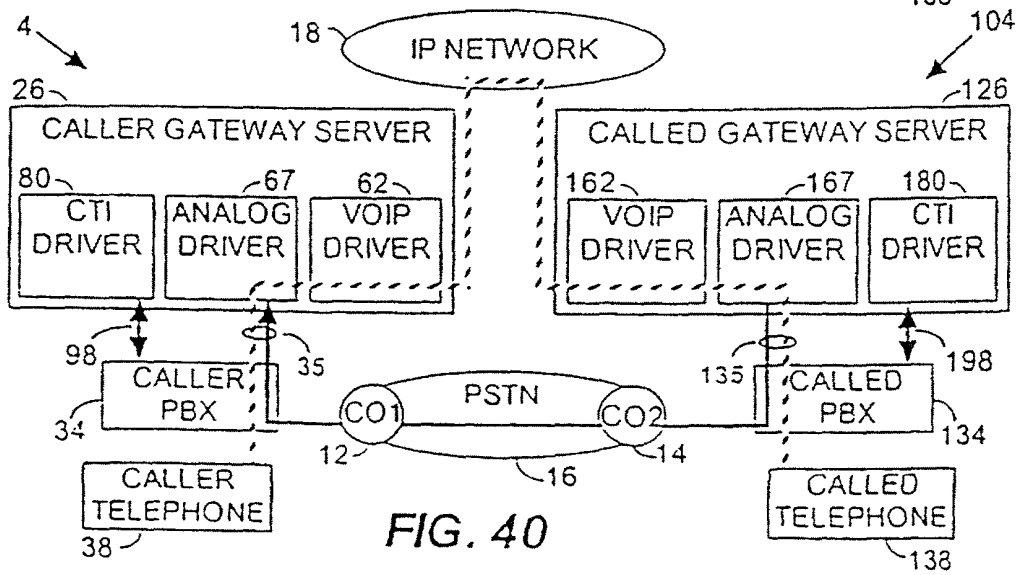

FIG. 40

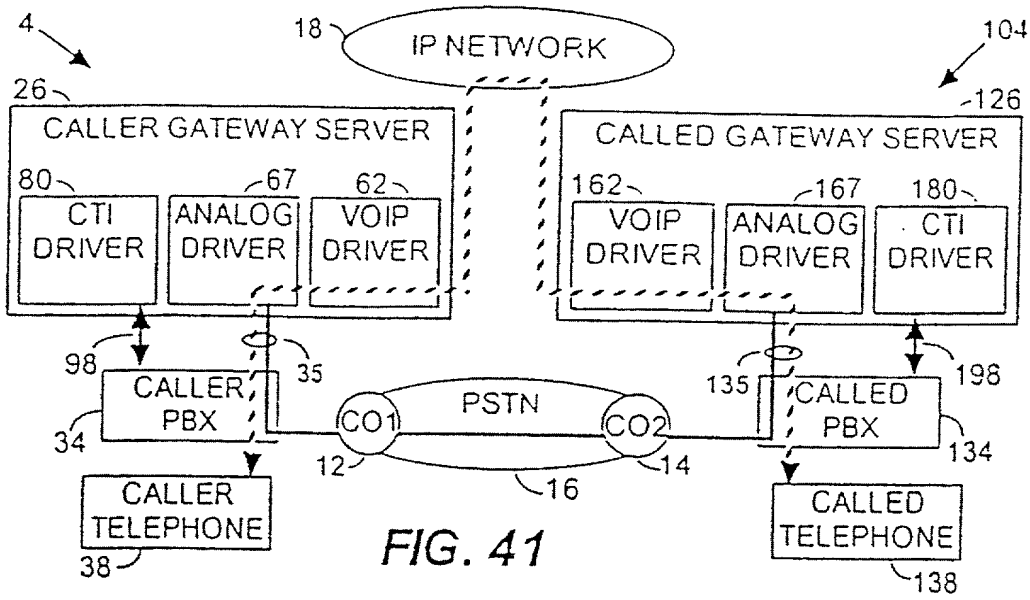

FIG. 41

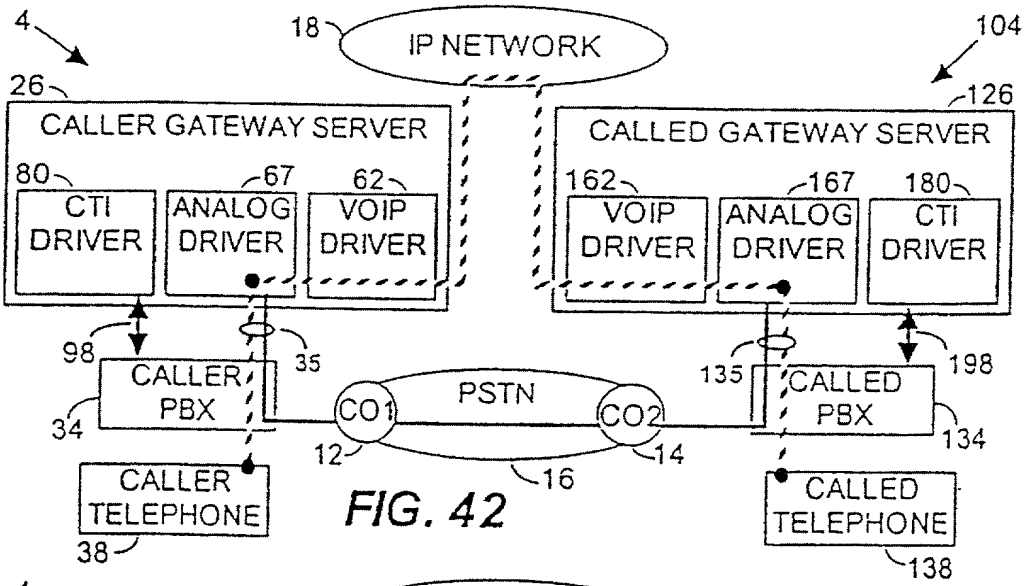

FIG. 42

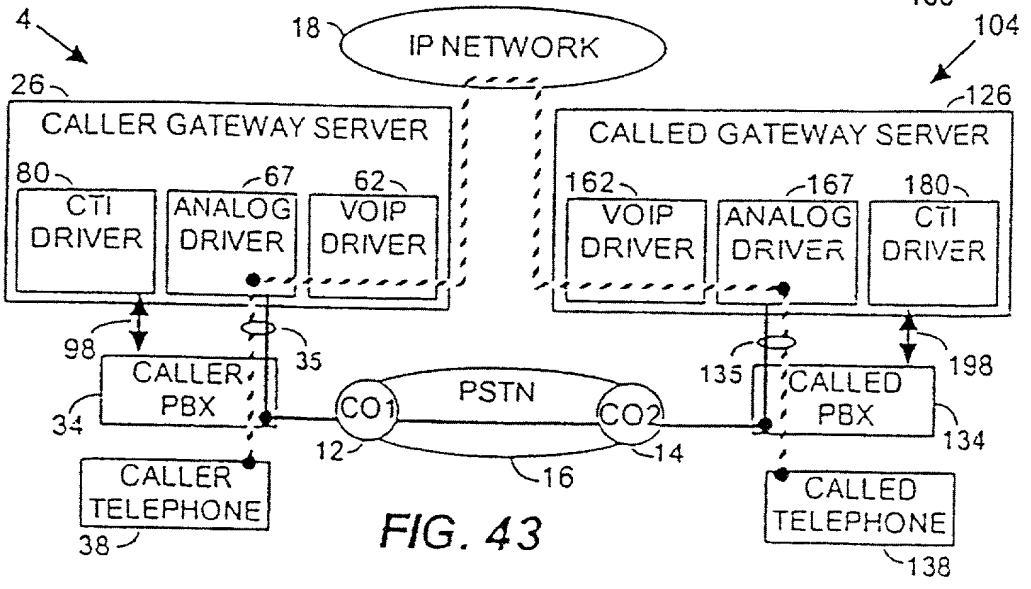

FIG. 43

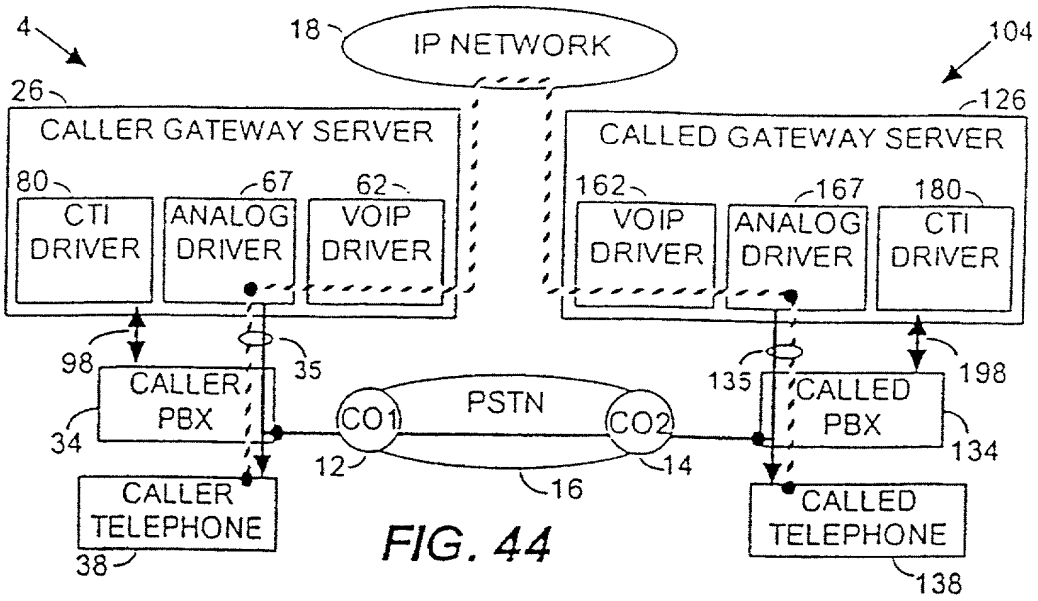

FIG. 44

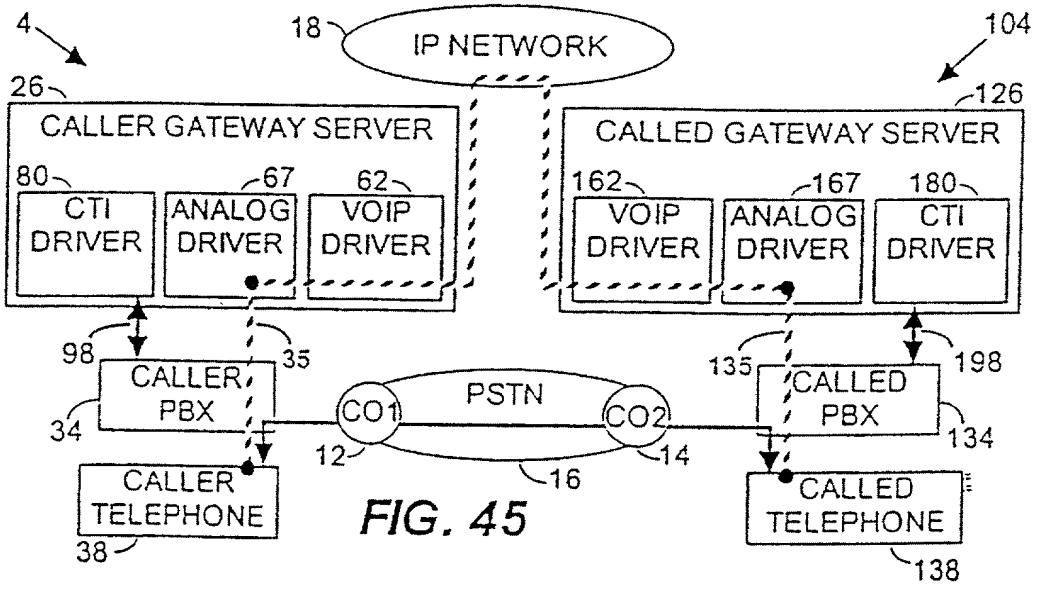

FIG. 45

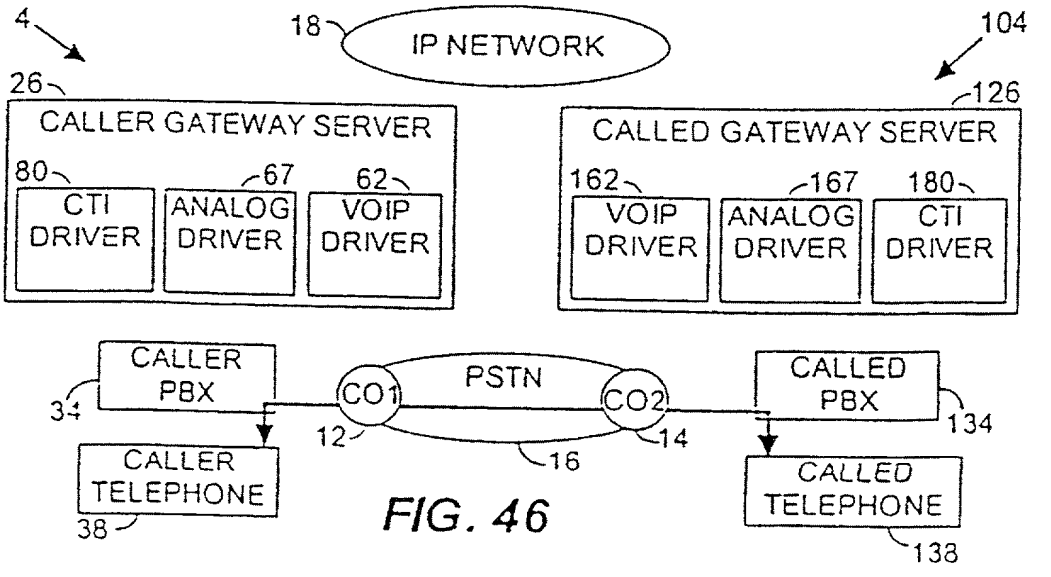

FIG. 46

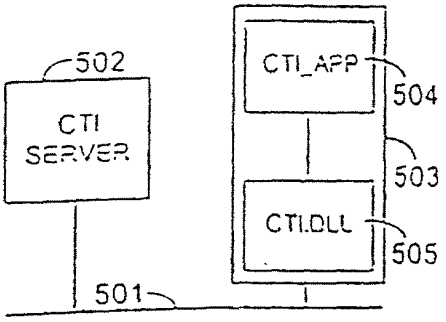

FIG. 47 (PRIOR ART)

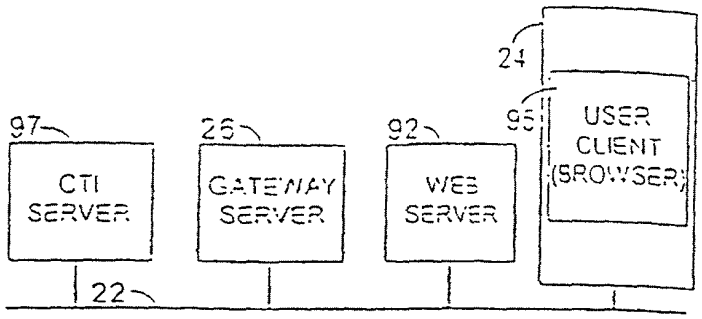

FIG. 48

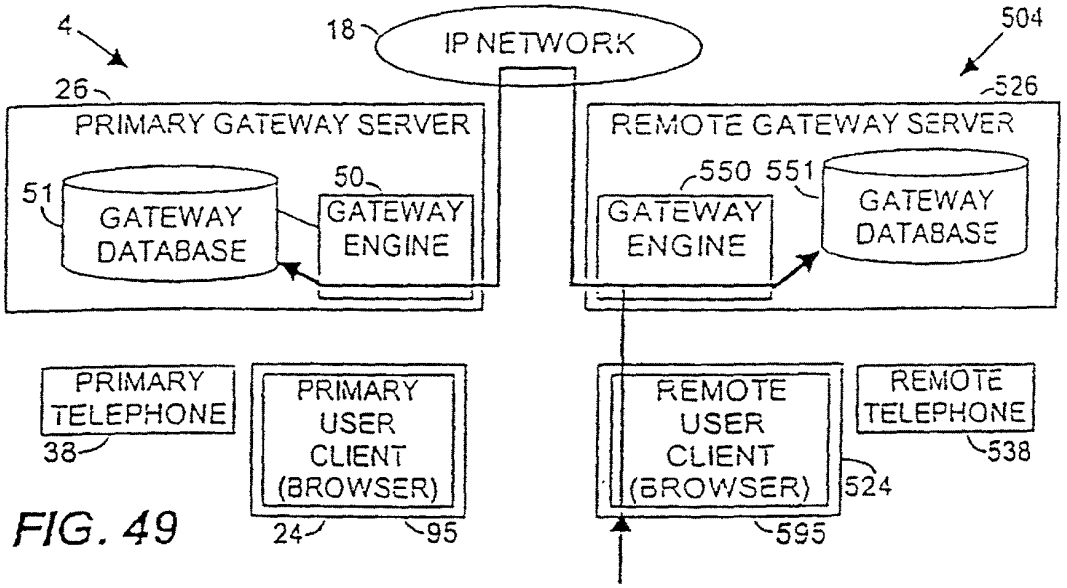

FIG. 49

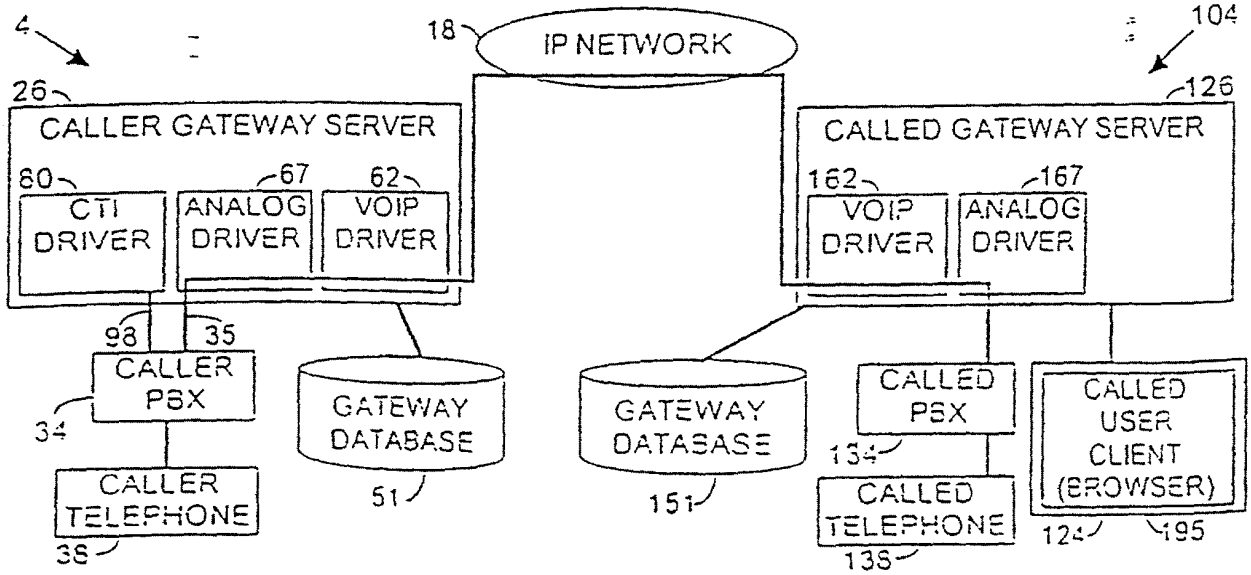

FIG. 50

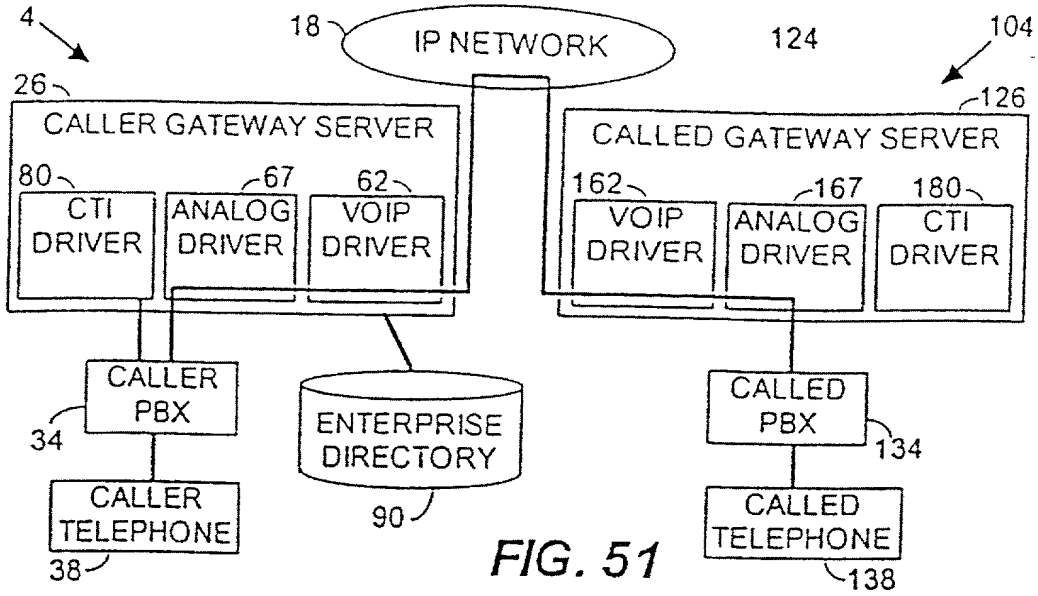

FIG. 51

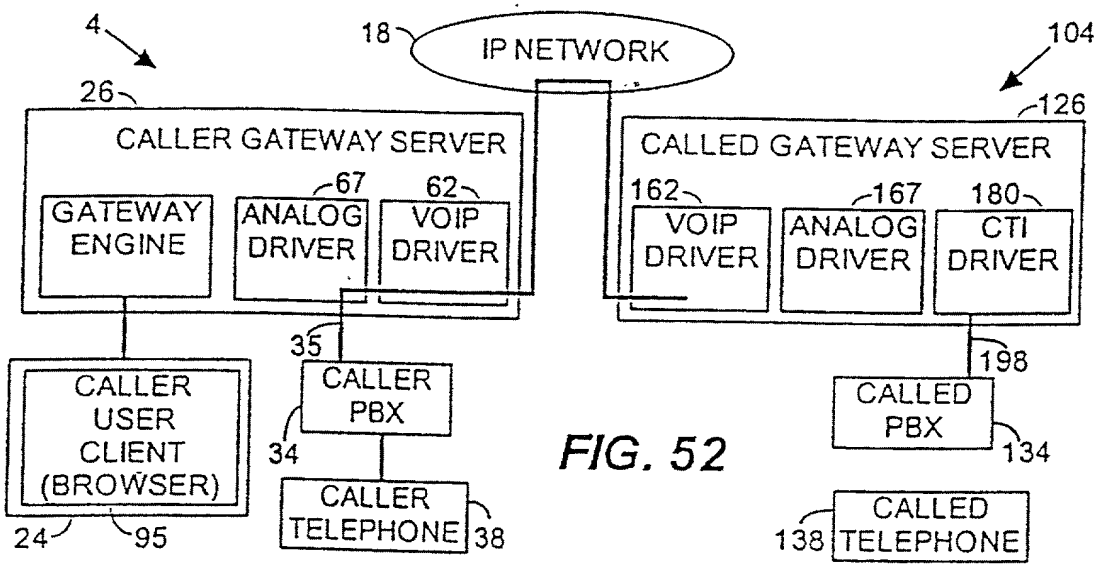

FIG. 52

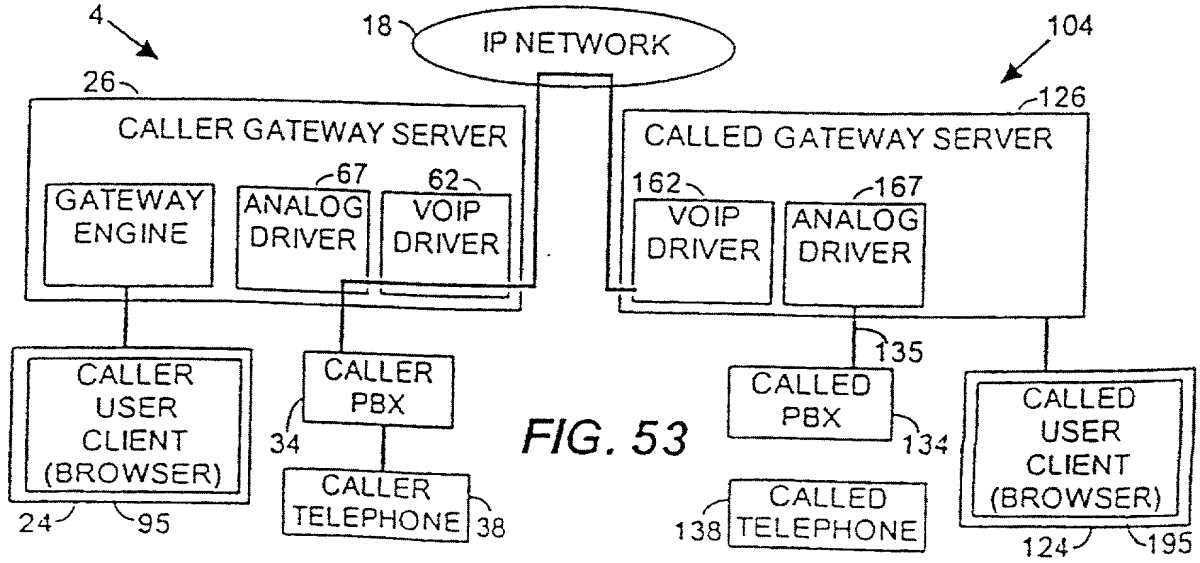

FIG. 53

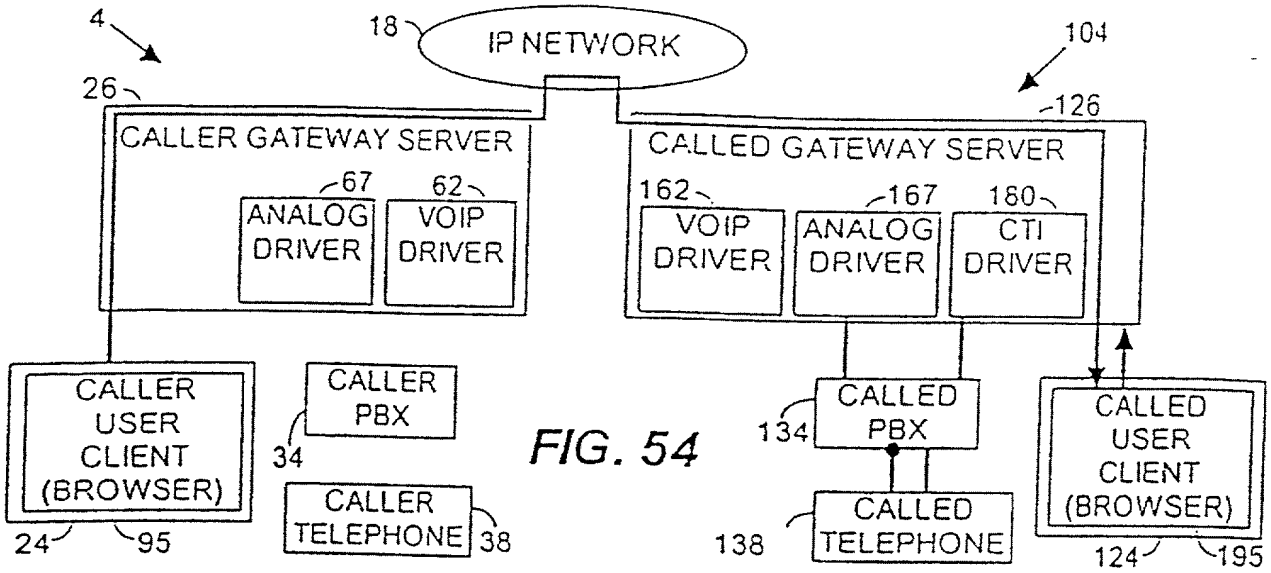

FIG. 54

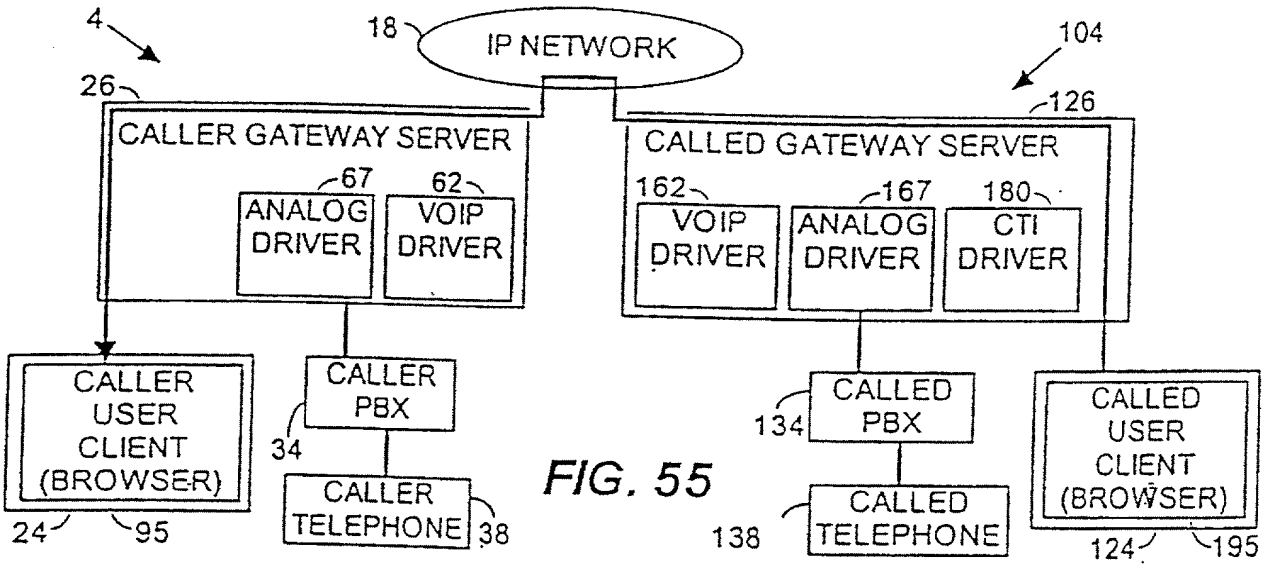

FIG. 55

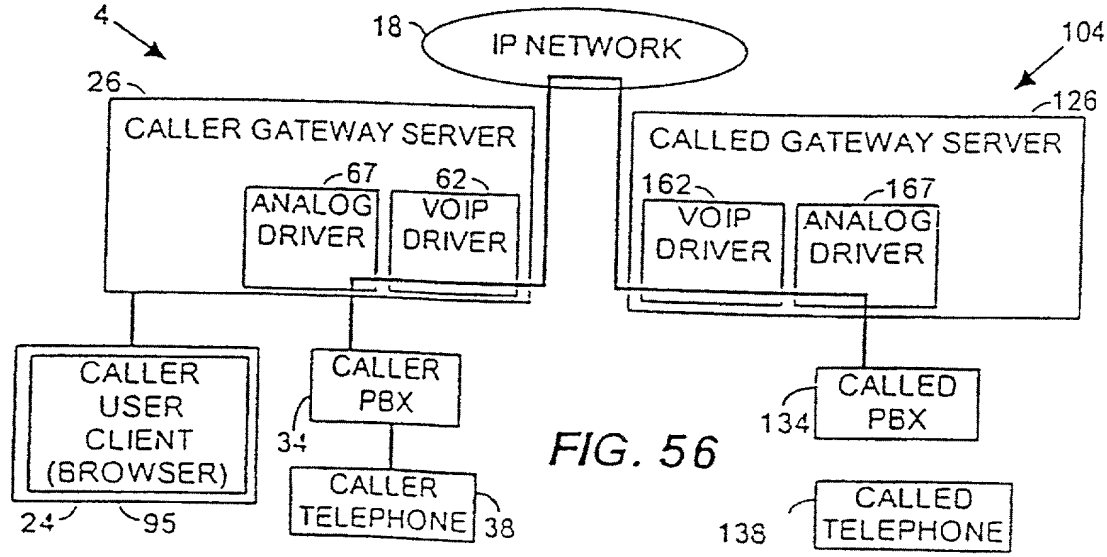

FIG. 56

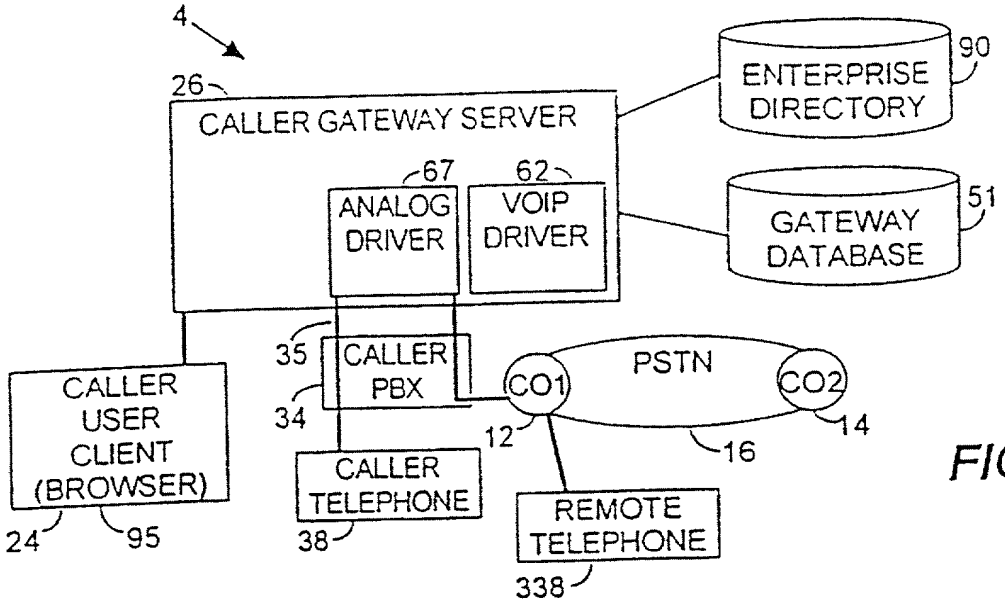
4
26
CALLER GATEWAY SERVER
ENTERPRISE DIRECTORY
90
67
62
ANALOG DRIVER
VOIP DRIVER
GATEWAY DATABASE
51
35
CALLER PBX
34
CO1
PSTN
CO2
12
16
14
CALLER USER CLIENT (BROWSER)
24
95
CALLER TELEPHONE
38
REMOTE TELEPHONE
338

FIG. 57

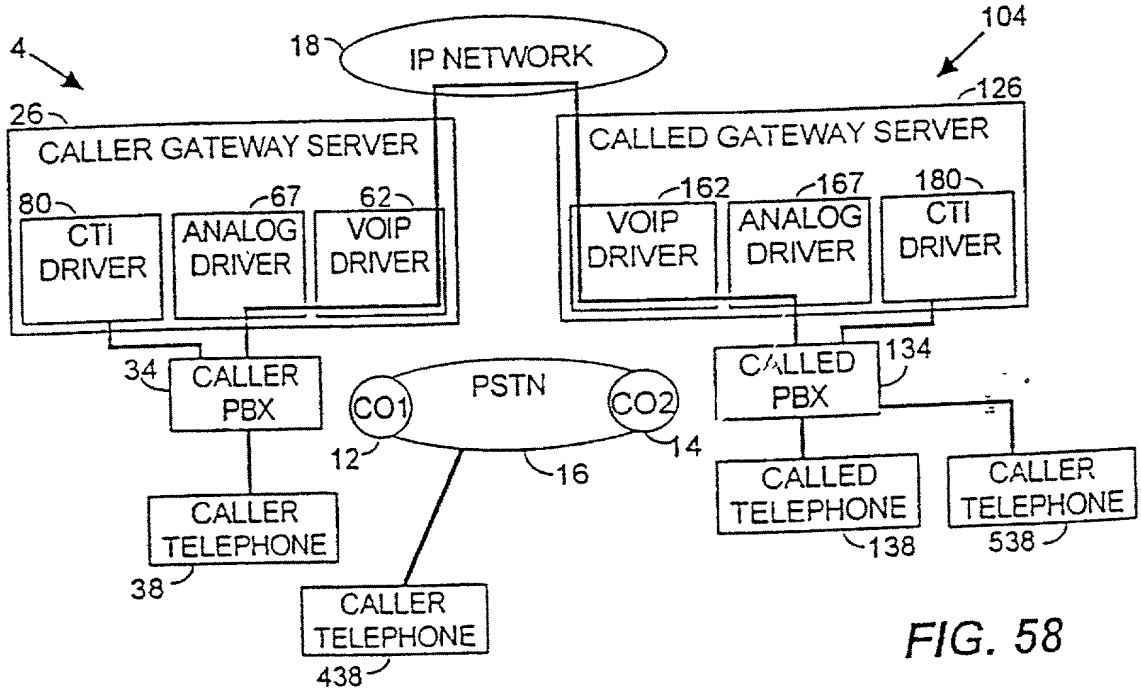
4
18
IP NETWORK
104
26
126
CALLER GATEWAY SERVER
CALLED GATEWAY SERVER
80
67
62
162
167
180
CTI DRIVER
ANALOG DRIVER
VOIP DRIVER
VOIP DRIVER
ANALOG DRIVER
CTI DRIVER
34
CALLER PBX
CO1
PSTN
CO2
12
16
14
CALLED PBX
134
CALLED TELEPHONE
138
CALLER TELEPHONE
538
CALLER TELEPHONE
38
CALLER TELEPHONE
438

FIG. 58